

The Best Amiga Magazine

# amiga

## user

### INTERNATIONAL

**Win!**  
All AUI's Top  
Games Of 1993!

£3.25  
JANUARY 1994

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January 1994 - Another fantastic program collection!

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**FMSYNTH** - Create FM sounds and play them; with lots of excellent examples.

**HYPER** - Invaluable utility for reading AmigaGuide documents.

**GALACTOIDS** - Terrific playable Galaxians clone.

**STEAMY** - Boost your windows performance.

**TOOLS DAEMON** - Latest version of this very popular utility.

Plus ShowGuru, the latest VirusChecker, Workbench Browser, MuchMore and much more!  
Check cover disk pages for compatibility

1MB RAM REQUIRED.

amiga  
User International



**The Best  
of the Best**  
**AUI's 1993  
Awards**



**No Disk?**  
**Ask Your Newsagent!**  
**Or see the Superdisk**  
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# The Vidi Amiga Range

Rombo, are proud to announce the launch of their new range of Multimedia Digitisers.

Each digitiser has been designed with total flexibility in mind, by offering a cost effective upgrade path between models. Giving the user complete peace of mind, and the freedom to choose a digitiser for his present requirements. But reassuring him, that if those change, he can move up to the next model. All Vidi Amiga's now have a similar user interface, so moving between products is easy !



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# amiga

## USER INTERNATIONAL

### Who Does What

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### ...And What They Used

Commodore's Amiga A3000, A2000, A500, Citizen's Swift 240C, Canon's BH-20 Bubblejet, Consultron's CrossDOS, Electronic Art's Deluxe Paint IV, GVP's A530 Turbo, Toshiba's IDE drive, Supra's V32 Fax Modem, Datel's Action Replay MKIII, ASDG's Art Department Professional, Epson's GT-6500 colour flatbed scanner, Readysoft's AMAX, OpalTech's Opalvision, Innovatronic's Directory Opus, JCL's ColourPic Plus and Cabaret, John Veldthuis' VirusChecker, JVC's HR-D980 Video Recorder, Micro-System's Scribble!, 32bit RAM from First Choice Computers, Discovery Software's Grabbit.

### AUI

*Amiga User International was first published in 1986. No other Amiga magazine had, at that time, been published in Europe. It has now come under new ownership and intends to continue as the best all round guide to the UK and International Amiga scene.*

## CONSTANT FACTORS

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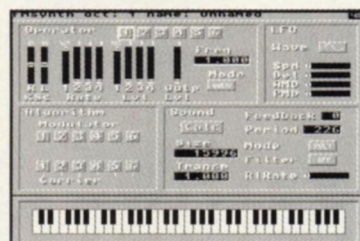
Now We Are Seven. On **au!**'s anniversary, Managing Editor Antony Jacobson looks back on When We Were Very Young and his memories of the machine which **au!** helped to success, Commodore's Amiga.

### 8 NewsFile

Stand aside Nicolas Witchell, look out Trevor McDougal, here come Anthony Mael and Martin Witton hightailing in with the lowdown on the scuttlebutt from the diverse Amiga universe.

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Bigger than Anneka Rice's rear end, more entertaining than the Star Wars trilogy and more useful than a yak-skinning kit, **au!** SuperDisk No. 30 has everything you'll ever need, except Long Johns, to see you through those dreary winter evenings. Try FM synthesis for groovy QWERTY tunes, or snot a million aliens in Galactoids. Compulsive!



Groove along with the **au!** Superdisk.

### 84 Edutainment

Martin Witton puts on his Radio One DJ hat to take you through 1993's top ten educational software releases.

Out of the World Cup, but on an Entertainment program - England! Scotland! Wales!



### 88 The Video Column

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Pass through the gate into the land of the PD.

### 100 The PD Stakeout

What's that in the sky? A bird? A plane? No, it's Gideon Overhead (boom boom!), with his latest trawl of the (almost) free and easy world of Public Domain.

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Right, let's get this right: it's your right to write to Write to Reply. Bud Vennos will write the right replies, right? So write away right away - or read it right now! Right?

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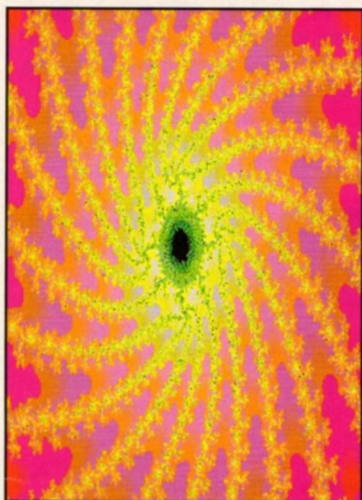
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Printalong with Gideon.

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Scala attacks the marketplace

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Don't terrorise your newsagent, ask us to bribe your postman into bringing you your *aii* fix instead.

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Don't don flat cap and walk whippet to computer shop 'til you've taken look at these. Ought for nought, but bargains assured.

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*Is the Amiga on its way out as a games machine? The aii playful trio of Ashley Cotter-Cairns, Andy Moss and David Taylor give a 16 page supplement - The Intelligent Game Players's Guide to Entertainment Now!*



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**I**t's about 16 years since Apple in the USA and Sinclair in the UK invented the home computer market. Some 14 years ago, Atari with their VCS 2600 created the video game market. Around eleven years back, Commodore, with its Vic 20, reached the then phenomenal figure of one million sales, the first time a million had ever been sold of a single computer.

At about the same time, a group of California-based technowizards, many of whom who had worked for Atari on console hardware and software, began thinking about and working up some ideas for a machine that would combine the best of home computing technology with the mass appeal of the games consoles. When they ran out of money they first went to Atari then to Commodore.

Nine years ago, in 1985, their computer was launched by Commodore in the USA. It was called the Amiga 1000.

A few Amigas, mostly for developers, came into Europe. But the computer was expensive - about £1700, which is probably worth about £3000 now - and it was aimed at the business market which was already beginning its love affair with MSDOS.

I saw my first Amiga in late 1985. I was editing Commodore Computing International, a magazine originally for the PET, Commodore's successful venture into the desktop business market, and later for the Commodore 64.

I thought straight away the Amiga was a brilliant machine, user-friendly and with stunning graphics potential. So I started a special section for the Amiga in CCI magazine.

Everyone thought I was mad, especially the software people. "Forget the Amiga," I was told by one software company boss, "Maybe the ST will make it, but not the Amiga.. Anyway we're not interested in 16 bit. 8 bit is the format for the future..." He has since probably made more money out of the Amiga than anything else.

**There were probably no more than 20,000 Amigas**

**in the UK, not enough to make a magazine**

**market... or so we were told.**

The quarterly Amiga section stayed a part of CCI for about a year. Then it was split off and became a subscription only magazine. Then a bi-monthly...

Commodore distributed it at shows like Which Computer and the Personal Computer World Show. Finally, against almost everyone's advice, I was the proud if slightly nervous editor when Amiga User International hit the newsstands in January 1988, the first magazine of its kind this side of the Atlantic.

There were probably no more than 20,000 Amigas in the UK, not enough to make a magazine market... or so we were told. But the Amiga was a computer to which a great many people already aspired. So a lot of those who bought the magazine just wanted to have their mouths made to water at the wonders that one day... one day... they would possess.

The others - Amiga users - were delighted with a fully-fledged magazine to

as easy as it looks.

The Christmases of 1988 and 1989 saw the Amiga leap forward in sales. The A500 was put into packs with games and suddenly the Amiga was hot. The games companies saw how to make lots of lovely cash from the prosperous people who were shelling out £399 for the machine and so would pay £25 for a game to play on it. Full price 8 bit games cost only for \$8.99...

The original enthusiasts and those who came later to the Amiga for more serious applications, typical *au!* readers, often told me they felt swamped by the four million or so Amigas that were sold in the UK and around the world during the next three

# The Amiga Dimension

**Imagine a dimension, not only of sight and of sound, but of mind . . .**

support the wisdom of their choice; and, of course, they bought *au!* to keep them informed about what was happening in their Amiga dimension and help them sharpen their skills on the computer. We soon had copies distributed to some twenty other countries, even the USA. And we had subscribers in twenty more. Commodore UK sent it out to dealers to persuade them of the reality of the Amiga.

Within a year of the launch of *au!*, there were four or five copycat Amiga

years. For those Amigas were bought as a superior and fashionable games machine for the early teens or even pre-teenage market.

*au!* was influenced by the change for we always try to cover the whole Amiga scene. But we didn't jump on the games bandwagon as other magazines did.

The Amiga had succeeded, but it had not taken the best of the early consoles, as its original creators had wanted, it had become the console. So when cheaper and more trendy real consoles, Nintendos and Segas, appeared, it wasn't surprising that the Amiga was quickly displaced by them. Toys come and go fast, don't they?

Recently a senior games industry figure asked me how long I gave the Amiga computer - not the Amiga CD 32 - as a games machine.

"About 18 months." I ventured. "That's exactly how long we think it will last," he told me.

**But, as they say,**

**"What goes around, comes around."**

According to a recent survey, most of the leading games software people are saying the same too. They could be wrong, they have been before about the Amiga.

But, as they say, "What goes around, comes around." Today Commodore has a real games console and it's of the 32 bit next generation too. However, for many *au!* readers the real Amiga is the powerhouse computer that is not a console substitute: the 2000, 3000, the 4000, even the 1200, machines that can be used for what the original A1000 was, in spirit if not in power, destined.

*au!*, as any regular reader will know, has stuck to that view of the Amiga all along. We report on games - we have special coverage in this *au!* - but no-one, I hope, can accuse *au!* of treating the Amiga as a toy. For *au!*, the Amiga was and is a machine to be taken seriously - even if in the magazine we don't always take very seriously the world of which the Amiga is a part.

The Amiga is still gaining strength in exciting and developing areas: films, TV, video,

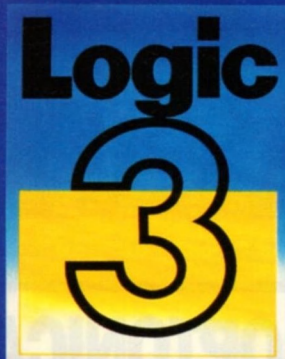
graphics, authoring, multimedia. These are where the power of the Amiga will grow.

I have a conviction that we all in the end get what we deserve. The Amiga will be left behind as a console - the CD 32 will carry on that role. *au!* will reflect the change that is coming and I believe that most of our readers will welcome it. I know from the letters I receive that many of you have been with us all along. And those who have become *au!* readers and stayed with the magazine have done so because it manages somehow to fit their idea of what the Amiga is and should be. And that's not as a games machine.

This is *au!*'s seventh birthday issue and I'd like to thank you and all *au!* readers for being with us today. These have been fascinating years. Next month we are moving the magazine again further toward what we think will be the Amiga's future. We hope you'll continue to enjoy it and share plenty of years yet with *au!* and the Amiga.

**Antony Jacobson**  
**Managing Editor and**  
**Publisher**





# Logic3

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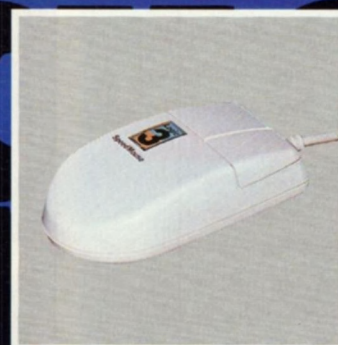
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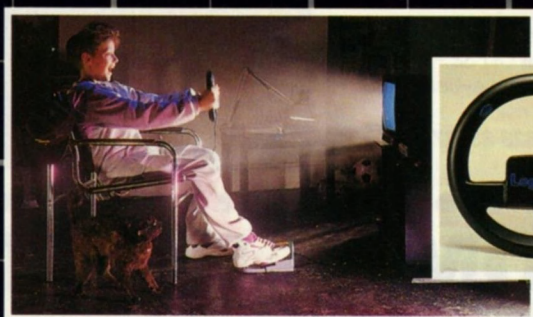


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Optonica Cries Wolves  
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Customer comes first!

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More than 2 Gigabytes!  
VTC Lock  
"Quote of the Month"  
CD plays PC  
Commodore's new C65  
Retina Aga Emulation  
Warped Reality  
Simon Says IBM  
The Key + Board

*Edited and compiled  
by Anthony Mael and  
Martin Witton*



Interestingly explosive new product ideas.

## Self Destruct Caddy

About to be launched is a Self Destructing CD caddy which it is claimed offers instantaneous destruction of confidential data via a small explosive cartridge added at the point of manufacture. Possible purchasers, they say, include defence establishments and other security-conscious sites. An additional option provides room for a built-in electronic tag to prevent unauthorised removal of sensitive data from libraries and other security conscious environments.

We're not too sure that we'd want too many of these self-destruct things around. You might come home to find your CD player - or Amiga CD 32 - just a pile of smoking ruins because Nelson the pussy cat jumped on the keyboard. But if you're in the 007-type business it is probably worth taking the risk.

**Contact: Impact Ltd - it seems an appropriate name! - on 0823 332972 or Staffors Tel: 0793 4880083.**

## ..... CUSTOMER COMES FIRST!

Bill Gates has been beaten into second place in a survey to find the most influential figure in the computer industry.

The clear winner was a rank outsider - the end user - who took 48% of the vote by 120 business and IT directors at a conference run by CSC Index.

Microsoft's billionaire Chairman trailed a distant

second with 20.5% with a close finish for third place between IBM chairman Louis Gerstner and 'anyone under 30' each of whom polled 8.5%! We like the "anyone under 30" category' especially those who are curvaceous, about 5'5" tall with long straight hair and wear lacy underclothes, even if they don't know anything about computers.

## OPTONICA CRIES WOLVES

The transformation of Molineux Stadium, home of Wolverhampton Wanderers Football Club, is close to completion. The project, requiring an investment of £14 million, has two new videowall screens which are claimed to be the largest permanent outdoor installations in Europe.

Hardware and software are of British manufacture, design and investment. The system is driven by Amiga based software, written by Optonica. The videowalls are flexible in their ability to manage pre-programmed and real-time video and computer graphics.

All that has to happen now is for Wolves to win something...which they haven't for a long time. Perhaps using Amigas will change their luck.

## FACTOID

To help them make the right growing decisions, the 120,000 farmers who do approximately 78 per cent of the farming in the US are using computer technology. Today's modern combine harvesters have as many as seven computers running in the cab. There are close to 90,000 farmers connected to on-line satellite services. And that ain't hay!



## Dazzling Print

### 600dpi UNDER GRAND

Hewlett-Packard has launched their cheapest ever 600DPI printer - the LaserJet 4P for £979.00. The LaserJet 4MP, costing £1,379.00 with auto-language switching and 6Mb of memory and the 4P replaces the IIIP and IIIP PostScript models. But with its high quality is claimed to bring pro quality DTP down to an achievable price level.

At recent computer shows in Europe and the USA we have seen some stupendous improvements in printing technology. One of the most impressive has been thermal transfer and the relatively new idea of dye sublimation. Don't ask us to explain it here, we haven't the space but one of the most impressive printers using it was called Primera. It ran most on the PC but a driver could also be

obtained for MACs. the printer cost over £1000 and produced simply stunning colour output. Ah, we said, if only it were on the Amiga...

Now its makers, Fargo Electronics Inc, have brought out an Amiga printer driver for Primera. The Primera uses wax thermal transfer technology which is usually associated with higher priced printers. For graphs, illustrations, and full colour 24-bit photographs, the printer driver supports the Amiga standard preferences printer interface. It's said to work with all Amigas with version 1,3 or higher operating system and requires 2 Mb RAM, with 4Mb RAM recommended.

We saw the first Primera to arrive in the UK recently. The colour quality is breathtaking and we were told that there will be two versions released in the UK, one will cost around £700 and the other about £900.

We have only an American address so far but for anyone in the



He's so happy, happy, happy that the Amiga finally has a Primera printer driver.

trade who wants to stock this printer which should sell like colourfully hot cakes, you could try contacting the ubiquitous and renowned ex-Commodore guy Bill (If it's Amiga I'll support it!) Owen. Otherwise..

**Contact: Fargo Electronics Incorporated, 7901 Flying Cloud Drive, Eden Prairie MN 55344.**

**Tel: 612 941 9470.**

We've been promised a Primera for review... We live in hope...

## PIRATICAL COMPANIES

Large companies are the most reluctant to admit that software theft is their responsibility rather than that of suppliers according to a survey which found that copying was prevalent within organisations.

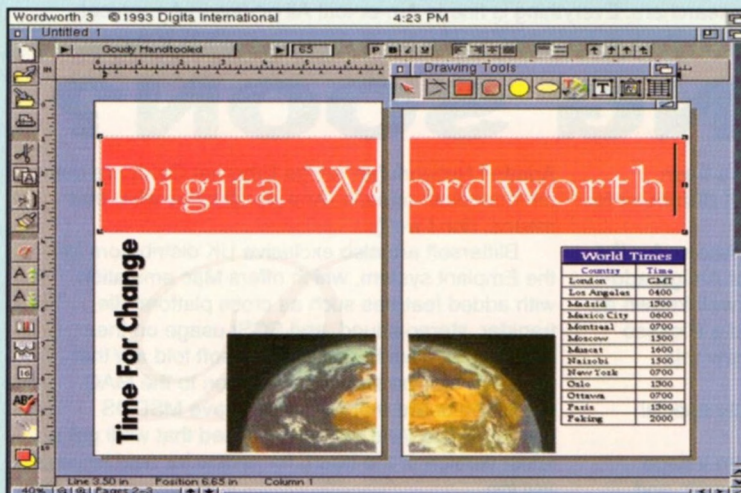
The survey from management consultancy KPMG was commissioned by the Federation Against Software Theft (FAST). It was found that over 80% of corporate directors say that they have already started keeping records and checking inventories. Comparing the results with previous surveys, KPMG found that 85% of directors were now aware of FAST.

What is happening to the 5% who know about FAST - and so must be aware of the illegality of pirating but are still not doing anything about checking up within their own companies? They are probably the sort of people who complain about the rising rate of crime. Hang 'em and flog 'em, we say.

## 3RD WORDSWORTH

Digita having given *au1* a sneak look at the latest version of Wordworth. This popular document processor has always been very powerful but even Wordworth 2 apparently left users whining. Digita told *au1* they had listened to complaints and were trying to produce a version that would please everyone, not exactly the easiest of tasks.

They are smartening up the requesters and offering more complex text facilities, such as shadowing and an ability to write text in strange formations like spirals. Wordworth 3 then will be



Digita's new Wordworth worth more to users.

another step towards DTP for the package. It will, they say, allow you to customize the program to the system you have, so you could install the whole package if you are a high end user or only bits you will need regularly if you have a more meagre setup. It will be theoretically possible to run it from floppy, but a harddrive is going to be a distinct advantage.

On the less cosmetic level, changes are being made to such areas as ASCII saving options to overcome the problems of earlier versions.

Version 3 will again be AGA and looks like being a quality document publisher for the serious user.



## CD

### JUKEBOX

If you, like everyone else these days, want to jump aboard the accelerating CD bandwagon, then an appropriate purchase might be a CD jukebox. Unfortunately, what we are referring to isn't the pub-type monster with which you might blast the neighbourhood with the latest in ice cool rap but a CD-ROM jukebox that more and more computer drive manufacturers are offering now.



Not a jukebox to bring you boogying on down...

These so-called Jukeboxes take up to 40 CDs which will probably give you more megabytes than you know what to do with, a mere 20 gigabytes in fact. They connect directly into a computer providing you, by our calculations, with a little package of storage which will take your 10,000,000 page autobiography with no trouble at all. (You've lived a full Amiga life haven't you?) At around £5000 these jukeboxes are not cheap but at least you don't have to put any coins in...

## Chipping In

The race for smaller and more integrated systems heats up. With Apple's PDA - Personal Digital Assistant - making its rather expensive - about £600 - debut recently, the massive USA company AT&T have announced an upgrade for their Hobbit chip family which already powers some hand-held devices.

AT&T who are really a big old phone company naturally want to see voice communications embedded in mobile electronics. So

it's not surprising to find their latest version of the Hobbit integrates voice and data communications which means that voice transmission could soon be seen as a normal part of the whole PDA scene.

A spokesman for AT&T told *ai* that "This could mean two chip cellular phone size devices with an easy to



AT&T's Hobbit chips into the PDA chatline. Will it make them lord of the phone rings?

use pen interface." Write on, man, let's hear it for the computer users!

## Mega Mice and Crystal Ball

Golden Image have announced a new improved Mega Mouse 400 for Amigas for £14.95. The MegaMouse features 400 DPI, micro switch Buttons; and, they say, rapid and smooth movement. It is said to be compatible with all Amigas and comes with 12 months warranty.

For the more affluent among us, £34.95, GoldenImage has the 'New, True' 300Dpi Optical Mouse which features no moving parts and requires just finger-tip operation

with micro-switch buttons, also with 12 months warranty.

Also priced £34.95 is the Crystal Trackball for the Amiga which has auto fire and key lock function. As an additional feature, Golden Image's Crystal Trackball now has colour shining at the touch of the ball rather than the shining when pressing the buttons.

**Contact: Golden Image UK Ltd., Unit 12a, Millmead Business Centre, Millmead Road, London N17 9QU. Tel: 081 365 1102.**

## ON-LINE BERNSTEIN

The estate of the late conductor and composer of West Side Story fame Leonard Bernstein has donated his archives to the library of the U.S. Congress and launched a plan to share them with the world in a new computer-accessible information system.

The digital encoding of Bernstein's manuscript scores, letters and other documents will enable anyone with a home computer and modem to access everything from the first script for his popular children's concerts to original scores.

The digital storage and dissemination of the Bernstein archives is seen as the beginning of a larger information sharing project that will eventually involve other multimedia collections across the United States and around the world in an electronic linkage available to the general public as well as researchers. Everything is fine in Am-er-ica! All on-line in Am-er-ica!

## COMING SOON?

Blittersoft has announced that they have been officially authorised as the exclusive UK distributor for Village Tronic of Germany.

Village Tronic are becoming well-known for the Picasso graphics board and other hot Amiga additions. (In the case of *ai* not so much well-known as notorious because we were promised a Picasso board and it hasn't arrived so no review this month.)

But the specs are, they tell us, pretty special. We'll see...

Blittersoft also have coming out from Village Tronic a Video encoder. The Liana Network; and

Ariadne Network (an Amiga Ethernet Card) are due for immediate release (And we all know what that means, don't we?).

Blittersoft are also exclusive UK distributors for the Emplant system, which offers Mac emulation, with added features such as cross platform file transfer, stereo sound, and SCSI usage on the Amiga side. Paul Leser of Blittersoft told *ai* that there will also be shortly an addition to the MAC emulation board that will let you have MSDOS emulation too. And he has promised that we'll get a latest version of the board for review for next issue of *ai* too.

## HEALTH WARNING

The Business Software Alliance has issued a High Court Order against the NHS Trent Regional Health Authority for the unauthorised copying of at least 15 different software programs from Microsoft, Lotus, WordPerfect, Symantec, Central Point and Xtree. Trent has admitted copyright infringement and undertaken to destroy the illegal copies, pay legal costs and refrain from copyright infringement in the future. The BSA is pressing for damages.

You'd think that this Government could at least keep its departments from ripping off software, wouldn't you? After all ministers are always these days bleating about crime and "basic values". What about them practising what they preach? As we've said before, we vote for the Hang 'em and Flog 'em Party. What about starting with criminal politicians? We'll teach 'em BASIC values. (And machine code too!)





Unleash the ultimate in Graphics Processing Power by upgrading your Amiga or PC with Director II.

## A Powerful 32 Bit Graphics Engine for Amiga or PC Platforms

The DIRECTOR II 32 bit system card brings the ultimate in graphics processing power to the Amiga and PC Platforms. When used with a range of readily available software packages the DIRECTOR II allows you to upgrade your office and home Amiga or PC to provide broadcast quality Paint, 3D Modelling, Morphing and CAD capabilities. Consider the uses for a system as powerful as this. Professional video production, animation, CAD, scientific visualisation and many other integrated video/computer graphics applications are all achievable.

### FEATURES

- 24 Bit live image capture.
- 8 Bit linear keyer.
- Digitally designed Genlock in 525 or 625 lines giving improved stability.
- Supports all PAL or NTSC broadcast sample rates.
- Supports up to 1600 x 1024 work station screens.
- Scrolling of full screen 24 bit pictures.
- 4 Meg VRAM & 4 Meg CPU DRAM.
- On board TMS 34020 processor with optional 34082 co-processor.
- Powerful expansion port for additional RAM and accessories.
- Available in Amiga or PC versions.

### PROCESSING POWER

The expandable design of DIRECTOR II boasts enough VRAM for a double buffered 32 bit display in PAL. The output may be scrolled directly from an internal buffer of 1024 x 1024 pixels in 32 bit. Horizontal resolution is infinitely programmable from 640 to 1500 pixels in 525 or 625 line rates. Increased resolutions are possible using the extra crystal sockets provided.

4 Megs of DRAM are provided, either as a graphics scratch pad or to run stand alone 34020 code, enabling the use of the optional 34082 co-processor for ultra fast rendering calculations. Optional expansion cards may be added to the ports on the top of the DIRECTOR II. These accessory cards fit into the PC slots on the Amiga or PC for user convenience.

### SOFTWARE COMPATIBILITY

Director II is supported by many of the leading Paint, 3D Modelling, Morphing and CAD software packages. Animation control is also available and our policy of continued development means we will be constantly working with other software developers to increase the libraries available to us and to include features such as, DVE with 3D effects.

### TECHNICAL

The CPU used in Director II is a Texas Instrument TMS 34020 graphics processor running at 32Mhz or 40Mhz (with optional TMS 34082 maths and 3D co-processor).

4Mb of 64-bit VRAM for image storage plus 4Mb of 32-bit DRAM for processor use is provided.

The Director II on the Amiga configures as both a contiguous 4Mb block with separate 64K control window (an '030 or '040 accelerator with extended ram is recommended for use if not already fitted as standard). The PC version is port mapped and configures using standard jumper links.

A high definition version of Director II is available to output 1250 and 1125 lines.

*Tritec Marketing*

Tritec Marketing Limited  
54-56 Station Approach, South Ruislip, Middlesex HA4 6SA  
Tel: 081 845 1400 Fax: 081 842 2781



## TAKING THE STRAIN

Despite the recent legal ruling that there is no such thing as repetitive strain injury - by some judge who's probably not heard of computer either, computer peripherals manufacturer, Lesco disagrees and is pressing on by developing preventative products.

The Ergo Rest is a device to support the forearm. It clamps onto the work surface and supports the parts of the body that take the strain while using a keyboard. (What about the brain?)

It has a floating movement so the wrists are not kept in a rigid position. Lesco claims the Ergo Rest reduces muscular tension to one-tenth the level usually experienced - so companies using it will save money on sick days and possible compensation claims by employees.

**The Ergo Rest costs £179.00.**  
**Contact: Lesco**  
**Tel: 0227 763637.**

## 10 OUT OF 10 PARTIES

Forget Tupperware and Underwear parties - though that last one sounds fine - the latest way to make money by demonstrating products at home is by throwing software parties.

Ten Out of Ten Educational Systems who produce educational type software, are offering 100 packs free to start up an Agency scheme. Agents simply arrange free trials of any 10 Out of 10 educational software product and receive at least £5.00 for every order generated from the trial.

Agents receive a portfolio and a boxed set of demonstration disks and manuals suitable for the



10 out of 10 for this party.

majority of home computers.

The packs are designed to do the work for themselves. Just leave them in a staff room or waiting room, wait for the orders to come in and watch your commission grow, says Steve Botterill, director of 10 Out Of 10. (Leave them around in a room here and it's the last you'd see of them!)

So if you're fed up with having lots of plastic bowls around the place and are really bored with your old black undies, yes, that means you M.W... get into the edutainment business. There's no business like 10 Out Of 10 business.. Or why not try having the underwear parties at the same time. Perhaps we can get ICPUG interested.

## TRAPFAX

As the phone companies compete more fiercely against each other, it could be that we will see a development toward what is usual in some parts of the USA, free local calls. that may bring lots more computer users into the on-line world. And that will bring programs like the new Trapfax from Village Tonic to the fore.

Village Tonic told **AUI** that the installation of this "state-of-the-art" software is easy and flexible. There is a fax queue manager and viewing is handled by a fax view feature. Sending and receiving faxes is said to work automatically in the background. Using a fax printer driver, faxes can be generated and sent from other programs such as word processors.

Trapfax can be integrated through ENVOY, Commodore's network program, into Amiga networks.

Trapfax will run on Amigas with as little as 521K.

**Contact: Blittersoft, 40 Colley Hill, Bradwell, Milton Keynes, Buck MK13 9DB Tel: 0908 220196**

## STAMPING OUT PROBLEMS?

Post Office Counters Ltd - which we used to just think of as the Post Office but is now for some unknown reason a separate company - says it is "harnessing computer power to cut out tedious paperwork for the 19,000 Subpostmasters, giving them more time to deal with their customers." Oh really?

More than 1,000 Post Offices around the country have now taken up a new computer package called Capture, which has been specially developed to help lighten the load of administration.

Each transaction is keyed into the computer, allowing client

summaries and the cash account to be printed. This helps to lessen errors, according to Capture Development Manager, John Murray, who estimates they can be reduced by 55%. That means not giving you ever more expensive 1st class stamps instead of no longer existing telegrams?

The system is sold to Subpostmasters as a complete package.

From our experience in post offices they have been so neglected over the years as the Government has tried to squeeze money out of them that a single computer package isn't going to make much difference. Research has shown, we have read, that incorporating information technology into businesses very rarely saves money. It may give managers more information on which to base decisions but you still need good managers to make the right choices. Do you believe the Post Office has them? Or this Government has them? Computers don't solve problems for those who aren't any good in the first place.



## Essex Club

Special Reserve Games Club have opened a second shop, this one situated in Chelmsford, Essex. The occasion was marked by a grand opening with a light show, and entertainment for children.

Founded by one of the stalwarts of the leisure software world, Tony Rainbird, Special Reserve now claims a membership of 180,000 and has been in existence since 1986. Membership prices start from £4.00 and a free catalogue is available from the sales line on 0279 600204. And we get letters saying how good they are to deal with!

**Contact: Special Reserve, Inter-Mediate Ltd.,**  
**2 South Block, The Maltings, Riverside Way, Sawbridgeworth,**  
**Herts CM21 9PG.**

*Special Reserve*  
*The Games Club*



## GUIs FOR BLIND

A new publication helping blind and partially sighted people cope with the increased use of graphical user interfaces (GUIs) has been produced by a European consortium which includes the RNIB. (Royal National Institute for the Blind).

The conventional methods for a blind person to access a computer are to use synthetic speech or a line of braille display - both of which satisfactorily handle linear text but can't cope directly with graphical representations such as icons. As blind employees need to perform at speeds similar to those of their sighted colleagues, the increasing use of GUIs could force them out of work. So it was thought necessary to develop solutions that are affordable, need minimum training and which keep pace with developing technology.

The EC Commission has provided funding for a major project to develop a number of methods to enable blind people to access GUIs: The Graphical User Interfaces for Blind People consortium (GUIB).

The booklet 'Access to Graphical User Interfaces by Blind People' describes the project and introduces the methods which the Consortium has developed so far. These include a virtual two-dimensional acoustic display; a new formal language to describe man-machine interfaces; and the use of non-speech sounds which are metaphorically related to the screen objects. 'Access to Graphical User Interfaces by Blind People' by John Gill is available free of charge from RNIB, 224 Great Portland Street, London W1N 6AA. Tel: 071 388 1266.

The Amiga seems to get plenty of exposure in the USA especially in the video and graphics field. In the UK, although for all we know the computer may be frequently used not too much publicity is given to it. That's a pity because as more and more people get to know it, more and more people would buy it and use it for creative arts.

It's encouraging to see though that some talented artists are using the Amiga in the UK and making it

The 81 year old Davis Packard, who co-founded computer and printer company Hewlett-Packard, has decided to retire as chairman of the company. He now joins William Hewlett as director emeritus.

And why should we, an Amiga magazine, be interested in Hewlett Packard affairs? We hear you cry. Because Davis Packard and William Hewlett are two of the most influential figures the world of computing has known. It was in fact they who really started the computing world as we now know it. They founded their still today highly profitable company in what we now call Silicon Valley when there were no other electronic companies there. They did it partly to draw on the flowing river of scientific talent from nearby Stanford

University. They had lectured there and realised that for technological progress in a company you needed bright young people with new and even revolutionary ideas. HP kept their staff by treating them well and letting them give their ideas full rein. And their company prospered through innovative ideas and well-produced quality products.

The big names today, companies like IBM and Microsoft, as well as people like Apple founder Steve Jobs have all recognised their debt to Hewlett and Packard who were men of vision.

With the retirement of Davis Packard, we are seeing the end of an era - which is a pretty strange feeling in an industry as young as computing.

## End of Era

## D I S K EXPANDER

Micro-PACE has told *AUI* it is distributing Disk Expander, a new utility from Germany. Disk Expander, Micro-PACE says, gives between 30 and 70% more hard disk space. It works in a similar way to the PC Stacker by compressing and decompressing files on the fly. However, unlike Stacker, Disk Expander works equally well on RAM disks, floppy disks and harddrives.

Disk expander's features, say Micro-PACE, include: easy installation using Commodore's Installer; intuitive interface for the main program; DEStatistics, a program to tell you just how much space you are saving on your hard drive, how the files were compressed and what the individual file compression ratios are. Files can be compressed individually or directories of files or entire volumes at the touch of a button.

Price £39.99 inc. VAT.

## VIDI (12) + (24)

Rombo have finally launched the long promised Vidi Amiga (12) RT and Vidi Amiga (24) RT (Why these things in brackets?) (We never use brackets!) (We don't think they're necessary) (Rombo do!)

Both products, Rombo told *AUI*, are aimed at the creative leisure, application and professional markets. 24-bit images true colour images can be captured from any video source and its said to capture 256 grey scale or 16.7 million colour images in real time.

The 12 RT costs £199.00, with the Vidi Amiga (24) RT £299.00 inc. VAT. Both are fully compatible with all Amigas. The 24 has the added capabilities but the 12 can be upgraded.

"Vidi Amiga," Rombo told *AUI*, "(24) RT has been designed to offer near photographic results if printed on a high resolution printer. It is useful for advertising and newsletters and powerful image processing has been included to manipulate or enhance the captured images."

Already well-known in the graphics field, the Vidi range is acknowledged as one of the outstanding hardware product lines to come out of this country, especially for the Amiga. The new versions look like providing even better facilities than previous successful Vidis. We hope to be able to provide a (full) review shortly.

Rombo recently won the SMART award for innovation in a manufacturing environment.

## SOON ON A BIG SCREEN NEAR YOU?

known too. At a recent film festival held at the holy of holies of moviedom in the UK, the Museum of the Moving Image - MOMI - a seven minute film made almost entirely with the Amiga by leading British video graphics artist Jane Wagman caused quite a stir.

Screened not once but several times and full of haunting and cleverly created images, the film was called "The Seamstress" and Jane Wagman told *au* that it took

nearly six months to put together. "Without the Amiga," she said, "I couldn't have done it."

Jane Wagman herself stars - she would say features - in the movie which shows a highly creative use both of film techniques and also of the computer. Starring, directing and producing and then creating on the Amiga even a short film is a daunting task but Jane Wagman seems to have come out of the

experience not only with her reputation growing to an international scale but eager for ideas for future projects too.

"I'll certainly continue with the Amiga and I'm actively looking for projects now in which its talents can be used." So any Sam Goldwyns out there, if you need some talented Amiga video or graphics work, let us know and we'll put you in touch with Jane Wagman.



Wagman's Amiga-based movie "The Seamstress". Sewing up the video graphics world?



## Sweet 16, Never Been Played

Virgin's Robocop vs Terminator on the Mega Drive has become the first Sega game to be issued with a classification from Sega as part of the games market's attempt to get itself out from under the somewhat hysterical reactions of the "straight" non-games playing world, especially the communications media, to violent computer games.

The 16 sticker on the packaging is supposed to alert parents and retailers to the possible negative effect for younger players. Virgin

say they decided that presenting the game to Sega for classification was the responsible route to take.

As cynical journoes we believe that putting a sticker saying "16" on a game isn't going to stop any player of 12 or so from playing it. In fact, a sticker that forbids him is probably going to be an incentive to a kid of that age to make sure he gets hold of it. If we, as ignorant newsgathers (Speak for yourself, Mael! M.W.) can figure that out, it shouldn't have been beyond those

smarties at Virgin - who have just sold a minuscule 15% of their company for a majuscule \$25 million - to have realised the same thing. So could the 16 sticker just turn out to be a neat marketing ploy? Shame on you, Amiga user, for thinking such a moneygrabbing thing!

And Sega are going into the censorship business and giving out classifications? Can't see Commodore taking the same route with CD.

## Ban Real Beat 'Em Ups?

We hear that one of the recent advertisers in *au* - at least up to a couple of months ago - Express PD has been raided by the Fuzz. No, it wasn't a complaint about bugs in the software but the content of the material they were selling. It seems that Express were sending through the post - as mail order companies often do - disks that were not boring utilities. These disks allegedly contravened the Obscene Publications Act and contained not just "Sexy Beauties" as the Express list said but people doing vicious and nasty things to each other or S & M as they call it in the telephone box trade around here.

Apparently Sado-Masochism ain't legal even if you like it.. and recently in a case being appealed from the UK to the, we hope, more civilised European courts, some poor old wrinklies in the UK who did painful deeds on each others' private parts were sent up the river for doing the sort of things that were shown on these Express Amiga PD disks.

Maybe we're odd but with a so-called crime wave happening doesn't it seem to you that the Police might have better things to do than chase out of business a PD company who are supplying a few poor (PD is cheap!) pathetic old pervs with some disks which they can goggle at on their very own private screens? Obscene publications... In most countries they'd think that a waste of the Fuzz's time. Funny country this... What on earth has it got to do with us what anyone watches on their monitors - or what we do in our bedrooms as long as we consent to it?

And computer companies are going to give out game classifications? What none for PD? What was it the Romans used to say about who will guard us from the guardians?

After the injunction Acorn thought that discretion was the better part of valour and hurriedly withdrew the video.

What a liberty! Describing the Amiga as just a games machine!! We know better than that, don't we, power users? Anyway how can anyone take an Archimedes seriously? The only people who would want one are those who have never tried Amigas! (You made a mistake there Barry Green!)

Score - in legal terms - Commodore 1 - Acorn 0.

## ICPUG UPDATE

The Independent Commodore Products Users Group has updated its list of regional groups. The Lothian Amiga Users Group have become affiliated to ICPUG, and there are changes for the Exeter and South Wales Group. The contact for Exeter is John Buckle - 0392 214760 and the group meets every second and fourth Thursdays at the Cowick Barton Inn, Cowick Lane, Exeter.

The contact for South Wales is Mike Bailey - 0446 775287 and meetings occur the first Monday at Llanblethian Village Hall, Cowbridge at 7.30pm.

ICPUG offers free software, a regular journal, technical help lines and discounts. If you would like to start an ICPUG group in your area, or for a list of current groups around the country, contact Janet Bickerstaff on 081 651 5436.

## AMIGA On CD

Syndesis 3D-ROM, an anthology of more than 500 freely distributable 3D models in formats is compatible with NewTek's LightWave and Impulse's Imagine. The disk (price \$199.95 about £130) is ISO-9660 standard and works on any computer platform.

The collection includes automobiles, spaceships, humanoids, buildings and more than 400 texture maps, and demo objects from 3-D model developers. The disk contains a catalogue with information on using them.

Parallel Motion Graphics from Sign Engine Pro is a sign-making and engraving program. The company's latest release is The Serial III Typecollection (price £300) on CD-ROM which is said to offer 4000 PostScript Type 1 sign fonts.

## COMMODORE 1 ACORN 0

Commodore UK has obtained an injunction in the High Court to prevent Acorn Computers from distributing an "educational" video called The Home Computer Minefield.

The video was produced by Acorn for the public and is supposed to be a beginners' guide to using home computers in the office and classroom. You could get, if you really wanted it, via reply coupons or telephone numbers advertised in the national press. But Commodore didn't take too

kindly to the idea of having the Amiga featured in a competitor's video. And so CBM took legal action because it believed the video gave a misleading impression of the Amiga and was produced merely as a means of knocking the performance of competitors. Now would you think a respectable computer company like Acorn would do a naughty thing like that?

Commodore alleged that The Home Computer Minefield implied Amigas are solely suitable for games and can't handle the office/educational applications shown in the video.

However, as we all know, the Amiga 1200, which is in the video shown as running only games, is perfectly capable of handling 'productivity' software of the type referred to and shown running elsewhere in the video.

Commodore, not a little narked let their legal beagles off the leash snarling and produced in court a long list of graphics, education, desktop publishing and accounts software, all of which are available for the A1200. (Pity they didn't include *AUI* - that's educational as everyone knows!)

## HARD HOME TIME

ZCL, one of Commodore's two main distributors to the retail trade, have negotiated a joint venture with ICL - Commodore's warranty company, to provide a door-to-door hard drive upgrade service for Amiga 600 and 1200 owners. The service will be offered through independent retailers, Calculus Stores and Indi, ZCL's mail order house.

This, say ZCL, will solve the problem of hard drive upgrades invalidating Commodore's At Home Warranty. As a bonus, ICL will be adding a further 12 months At Home Warranty to any existing warranty that A600 or 1200 may have, completely free of charge.

Contact: ZCL, Ridgeway Industrial estate, Eastern Avenue, Lichfield, Staffordshire WS13 7SF Tel: 0543 41461728.



# More than 2 Gigabytes!

There is now a massive 2.2 gigabyte SCSI drive for the Amiga from Seagate. They say it's "perfect for hard disk audio recording, video animation and lots more"! Wow! We should think so too, with that much storage available.

The drive is so big, in fact, it needs an external double chassis. How much? Just \$2000.00 - about £1300.00, which works out at about 60p a megabyte. pretty cheap. So far it's only on sale in the USA. Storage there - and here - gets cheaper & cheaper...

# CD plays PC

Multimedia is claimed to be finding its way into portable PCs, but the vendors have very different ways of integrating the technologies as shown by two machines launched by Toshiba and Panasonic recently.



Heavyweight in price, Panasonic's portable PC CD would be no match for a CD32.

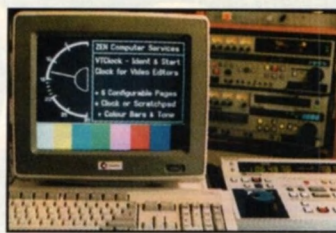
Panasonic's relatively lightweight 2.7 kilo mono version is priced at around £2000 with a colour screen coming at £3700. Toshiba's T6600C heavyweight at around £6000 is a 7.8kg attache case-sized hulk with built-in "multimedia facilities" including CD-ROM drive, Microsoft sound system and stereo speakers.

Of course, these machines are really just PCs with a portable CD-ROM drive. Nothing wrong with that though. Will someone build screen onto a CD 32 and let me carry it round? At £299 plus the cost of screen - say £300? - and the added capacity to read MSDOS, it could clean up the market.

# VTCLOCK

Zen Computer Services are bringing out VTClock, an Amiga-based ident clock for video editors. The program has six display pages, each of which can be configured either as a clock or as a scratchpad for simple captions. The clock pages feature a 30 second analogue clock together with seven lines of ident text on the right hand side. In scratchpad mode, the seven lines of text extend across the full width of the screen. In addition the program can generate standard colour bars and 1KHz tone, either together or independently of each other.

The clock can be reset to 10, 15, 20 or 30 seconds and when counting down will generate 1KHz tone between 25 & 20



Clocking in for video idents.

seconds, followed by a white flash-frame at 10 seconds.

The ident text may be edited via a simple WYSIWYG editor and any Amiga font can be loaded and used for the text display. All Amiga keyboard layouts are supported.

VTClock costs £30.00 + VAT.

**Contact: Zen Computer Services, 2 Silver Birch Grove, Swinton Manchester M27 1FS. Tel: 061 793 1931.**

# COMMODORE'S New C65!

'The C65... a new 64 just released in Europe with a built-in 3 1/2" drive - a 1581 floppy on the front'. Oh really?

This was an item seen in an advertisement in a U.S. Amiga magazine. The ad purported to be, and perhaps even was, selling stock that Commodore because of their recent shutdown of U.S. activities no longer needed. Certainly they wouldn't have needed "A new 64"!

But C65... just released (from its dust-covered cage?) in Europe? That's the first we've heard of it... Unless it's moving into Eastern Europe to places like Poland. We have heard whispers that is where the UK unsold CDTV's were sent. (A pretty good buy - a new computer and a CD player!) Could it be the CDTV or is the C65 why Almathera are rumoured to have set up an office in Poland?

# RETINA AGA EMULATION

Retina offers, it is claimed, the features of the A4000, in fact, AGA Emulation on an A2000/300. This means you can have a 256 colour Workbench and run AGA programs on the A2000 or 3000. Now isn't that nice news for you 2000/3000 owners? (But not so nice for CBM who want to sell the later machine!)

The Retina is said to be the first single card solution integrating the best features of the Amiga's graphical user interface with the ability to display Workbench or AmigaOS compliant programs on their own custom screen in resolutions up to 1280 x 1024.

The XIPaint real-time 24Bit paint program comes with Retina. The makers say that the Retina can still be used to display 24Bit graphics while displaying Workbench. Retina animation software is included to make 8, 16 or 24 Bit animations.

Packages supporting the Retina are said to include: ADPro, Aladdin4D, MorphPlus, MultiFrame-AdPro, ProPage, Pagestream, ProWrite, Imagine2.0, TVPaint2.0 Professional, Dynacadd, Panorama, Real3D 2.0 and VLab.

Watch for the Retina review in the February *au*.

# "QUOTE OF THE MONTH"

"Nobody pretends that GUIs are the last word in ease of use. By 1995, the concept will be 12 years old, Apple's Lisa having been launched at the beginning of 1983. There are alternatives. The principle of 'intuitive' computing will not depend for ever on Ladybird picture books."

This was a wise editorial comment recently made in Computing Week magazine, and it certainly throws a sensible light on what we all might accept as natural even permanent. GUIs are just another passing phase though at this moment they may seem a great improvement on previous interfaces and, like all things until they change, a pretty solid fixture.

But then black and white TV seemed natural and, before cars, horse-drawn carriages. And 64K seemed enormous... What comes next for interfaces? Speak to it? Point at it? Even look at it or think at it? For sure GUIs are not the end of it..

# WARPED REALITY

Warp 10 is claimed to have a speed fuelled by Digital Micronics' Vivid 24 graphics card, installed with at least one TMS34082 coprocessor with SRAM. 24-bit warps (image distortions) and morphs (transformations of one image to another), it is claimed, can be played back in real time.

Although Warp 10 works in 24-bit mode, it can load normal IFF images. It is to be sold as a standalone package to use with Vivid 24 or as an add-on module to the card's Animator Broadcast software. Price about £550.00.

# SIMON SAYS IBM

IBM is edging the way into the PDA market with "Simon". Simon is not so much a computer as a cellular phone with computer extras which is about to go on sale in the US. The extras include a wireless fax, pager, Email, scheduling, calendar and address book applications. Simon is said to use electronic ink recognition - storing an image of the handwriting rather than converting it into text.

IBM is expected to launch a version of Simon in Europe this year. The U.S. prototype had infra-red network support and pen input. "Speech navigation and PCMCIA support for satellite reception, network connection and image transmission are under development."

Speech navigation? Does that mean if you see some grey suit talking to his wrist, he's not Dick Tracy but some even barmier soul controlling a satellite??? Help! Please don't repeat this item to anybody they'll take you to be the ex-head of Napsbury Psychiatric Hospital and cart you away in a plain van.

# The Key + Board

Tritec have developed a board for installation in PCs or Amigas that, they say, not only acts as a decoder/coder/transcoder, but also as a multilevel keyer. tritec say that bringing the Amiga further into the professional TV market place, Key + is a 3 layer linear keyer on a card which, when used in combination with the Director II graphics board, can control software. Key + fits into one of the spare slots on the Amiga.

## COMDEC

Tritec have also produced the Comdec video/audio compression board which, they say, is capable of compressing / de-compressing incoming video to and from hard disk at 25 or 30 frames per second without visible loss in quality or the need to drop frames.

**Contact: Tritec Marketing Ltd., Ground Floor, 54-56 Station Approach, South Ruislip, Middlesex. HA4 6SA. Tel: 081 845 1400.**





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When ordering by post please include a full description of the goods and the price. It is a good idea to phone before ordering so as to avoid disappointment. Please make all cheques and postal orders payable to SOFTWARE DEMON LTD. and allow 5 working days for cheques to clear.

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If you are in the area or live locally please don't hesitate to visit our shop. Our friendly staff are available for advice and are willing to demonstrate any of our stock to give you a better idea of what you want. Our shop also carries the full range of latest entertainment software and has a games zone where you can park the kids or play the latest games.

Please note that in our effort to bring you the best value available our prices are subject to change without notice. This does not necessarily mean that the prices will go up.

## DELIVERY

All purchases are made up to order and then dispatched. All customer modifications generally take 3-4 days to fit. The goods are then dispatched via our courier service on a 24 hour delivery schedule. If no-one is available to receive the goods then the courier will leave a card explaining how to arrange a delivery to suit you. Saturday delivery can be arranged at a small surcharge.

DELIVERY £10  
PICKUP & FIT SERVICE £29

## COMPUTERS AND HARD DRIVES

### AMIGA A4000/040

The flagship of the Commodore Amiga range. Based around the 68040 processor. Comes with Hard Drive, 2+4 RAM and WB3.

85Mb version	£1899
120Mb version	£1919
170Mb version	£1939
250Mb version	£1979
340Mb version	£2069
426Mb version	£2149

### AMIGA A4000/030

The same specifications as it's big brother but designed around the EC68030 processor. Comes with a Hard Drive, 1+1 RAM and WB3.

FOR 2+2 ADD £69

85Mb version	£939
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85Mb	£129
120Mb	£149
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### MONITORS FOR CD32

Why tie-up your TV this Christmas? Buy a composite input monitor for sharper gameplay and graphics.

1084S MONITOR PHONE FOR  
LATEST PRICES AND  
AVAILABILITY

### AMIGA A1200

#### DESKTOP DYNAMITE PACK

The A1200 sports many features of the A4000 series. Based around a 68020 processor, 2Mb of RAM and WB3 as standard. A full range of hard drives are also available. The desktop dynamite pack is supplied with a range of software written specifically for the AA chipset, including DPaint AGA and Wordworth AGA plus others with a total RRP of over £300

Basic	£289
20Mb HD version	£369
40Mb HD version	£388
60Mb HD version	£445
85Mb HD version	£468
127Mb HD version	£494
170Mb HD version	£528
220Mb HD version	£548
256Mb HD version	£578

### IDE HARD DRIVE KITS

These drives can be fitted to the A1200 at any time by us or the end user. The kit comes complete with all software necessary to configure the drive.

40Mb	£139
85Mb	£179
120Mb	£279
209Mb	£399

### A1200 HARD DRIVES

These hard drives can be added to your existing system and are installed by our technicians to ensure the best fit. They come with a 1 year return to base warranty on the drive and the computer.

40Mb	£99
85Mb	£179
120Mb	£239
170Mb	£269
250Mb	£329
330Mb	£399
426Mb	£499

All hard drives fitted after time of purchase must add £29 fitting fee

## UPGRADES

### CD ROM DRIVE

The ultimate in data storage and high speed transfer rates for the A4000 series. These multisession CD ROM drives come complete with all the necessary mounting software, SCSI controller card and software to enable the use of CDTV discs.

Welcome to the future of home entertainment.

### CD ROM DRIVE £399

PLEASE ADD £29 FOR 2 CDDPD  
FRED FISH DISCS(OVER 1000MB)

### MATHS CO-PRO (PLCC)

25MHz 68882	£89
40MHz 68882	£129

### MEMORY

single sided SIMMS module for A4000

1Mb RAM	£39
4Mb RAM	£169

## ACCELERATORS

Our accelerators are produced for the A1200 by GVP, a watch word in quality and reliability. Both boards are user fittable via the trapdoor so as to maintain your warranty.

### GVP SCSI/RAM BOARD

This board has slots for up to 8Mb of RAM, a maths co-pro and has and includes an SCSI interface as standard

0Mb/NO FPU	£179
4MB/33MHz FPU	£349
SCSI CABLE KIT	£44

### GVP A1230 BOARD

This board features a 68030 processor as standard and also has slots for up to 8Mb of RAM and maths co-pro.

0Mb/NO FPU	£269
4Mb/40MHZ FPU	£439

### GVP ACCESSORIES

33MHz 68882 FPU	£79
40MHz 68882 FPU	£129
32bit 1Mb RAM	£64
32bit 4Mb RAM	£153



# DEMON

## THE OVERDRIVE EXTERNAL HD



### THE OVERDRIVE 35

These external hard drives come in an ABS box styled to match the Amiga A1200. They plug in via the PCMCIA slot and include an external PSU so as not to invalidate your Commodore warranty. Ultra fast data transfer rate of 2Mb/sec. Full 1 year return-to-base guarantee. They come supplied with all the necessary software to mount and configure the drive.

40Mb	£189
85Mb	£249
170Mb	£319
220Mb	£339
250Mb	£369
340Mb	£419
426Mb	£519

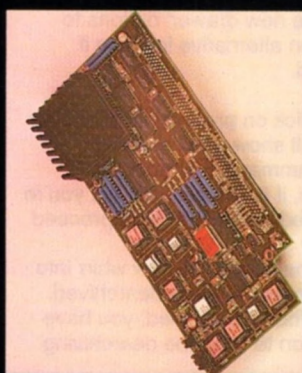
### THE OVERDRIVE 25

The compact version of the OVERDRIVE 3. This model is design to be transported, it's size has been reduced, the internal hardware has been upgraded to deal with the problems created by moving hard drives around and the power is now drawn internally. So, hey just put it in your pocket and away you go.

TYPICAL TRANSFER RATE:-1.2Mb/sec

20Mb	£99
40Mb	£169
60Mb	£199
80Mb	£249

## TURBO CHARGE YOUR A4000/030



### PHOTON UPGRADE

Finding that your A4000/030 isn't quite man enough for your present projects? Never fear Software Demon is here.

We are now able to offer an upgrade service, saving all the hassle of selling your old Amiga. So, to upgrade just send in your main CPU module and front panel and we will part-exchange it for a genuine Commodore 040 CPU module; which includes an MMU and built in FPU and a new A4000/040 front panel.

### PHOTON UPGRADE £799

### HELLFIRE UPGRADE

#### AVAILABLE SOON

Our latest development has produced a stunning new way to improve the performance of your A4000/030 at an incredibly low price. It comes in the form of a replacement CPU module which slots in where your present module sits. It's features include a 50MHz standard clock speed; an MMU as standard and a built in 50MHz FPU. To upgrade will require you sending us your original CPU module which we will then part exchange for our new A4000/030 accelerator.

PRICE?  
PLEASE PHONE FOR  
DETAILS  
PROJECTED RRP £299

## LEISURE & ENTERTAINMENT CIVILIZATION AGA

This is it, the bees knees. It's the ultimate god game. This game is Microprose's flagship, it's won a host of awards and now it's been upgraded to make the most of the new AGA chipset. If you don't already own a copy of Civilization then you don't know what you're missing, and if you have an original copy then you'll be stunned by the improvements. So either buy it now or upgrade and get into the most serious game of all time.

### CIVILIZATION AGA £39 UPGRADE £19

To upgrade just send the 4 original disks including £19 and your name and address.

## CD32 CONSOLE

This machine represent the future of home entertainment and video game play. A self contained CD console which you can expand to a full CD based home computer. It is built around true 32bit technology with 256 screen colours, 68020 processor with a 14MHz clock speed and high resolution screen display. Read the reviews and hear what the experts have got to say about Commodore's new baby. I think you'll agree it's time to kiss Sonic Goodbye and wish Mario a fond farewell because the future is here. Optional extras include a keyboard, floppy drive, mouse and a hard drive. All of which will be available soon.

CD32 is supplied with 2 great software titles written for the AGA chipset and designed to display the full range of CD32's assets.

## ALL FOR THE MEASLY PRICE OF £279



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We at SOFTWARE DEMON LTD endeavour to bring you the best value at the cheapest price possible. This is not easy in this day and age of multi-national corporations bulk buying everything in sight and then shifting it as fast as possible, not caring where it goes just as long as they get the cash.

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# au! SuperDisk

**This SuperDisk contains another fine collection of utilities and thrown in for good measure is a classic and highly playable game. All collected and engineered by Patrick Howlett.**

**W**elcome to SuperDisk 30, another disk packed full of the best utilities around. Lha has again been used to crunch a massive 1.5 megs onto 1 disk, but DON'T PANIC! We've used 'installer' (Commodore's own Licenseware utility) to make the dearchiving procedure about as easy as it could possibly be.

## procedure

**1** Boot up your machine with Workbench or the SuperDisk. Double click on the SuperDisk Install icon and wait for the installer program to load.

**2** Unless you really want a log of every action that is performed by the program, simply click on 'proceed' to get underway. As the message says, you are about to start the dearchiving procedure, so click on 'proceed' again to get underway for real!

**3** Now select hard or floppy drive as your destination device and click on 'proceed'. Note, if you want to dearchive to the RAM disk click on proceed anyway, since the RAM disk can be selected later in the procedure (and is in fact the default directory).

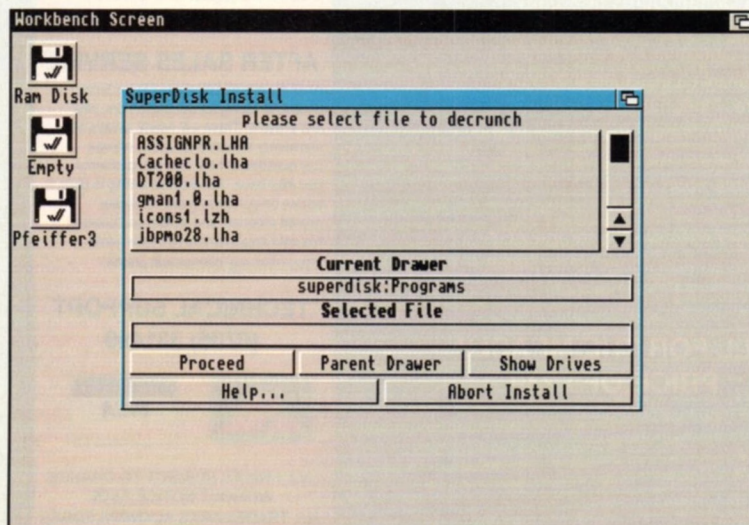
**4** You should see a scrollable list of the archived programs on the SuperDisk, use the up/down arrows or scroll bar to scroll the list. Click on the file that you wish to dearchive and click on 'proceed'. The install program will now ask you where the file should

be dearchived to, the default is RAM, but use the 'show drives' and/or 'make new drawer' options to select an alternative location if required.

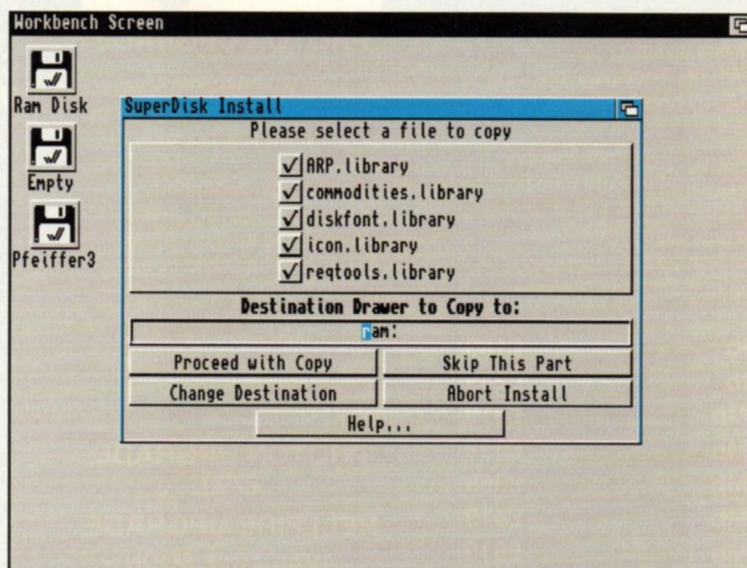
**5** Click on proceed and installer will show you the exact command it is about to execute, if it all looks good (if you're interested that is), click on proceed.

**6** The floppy will now whirr into life as the file is dearchived. When it's finished, you have the option to continue dearchiving

(by going through the selection process again) or finishing the dearchive procedure. If you choose the latter, the final task is to decide whether or not to install any libraries. If you select 'Yes', the installer will show a list of all the library files available on the SuperDisk. Click on a particular library to remove its 'tick' thus indicating that the library file will not be copied. Select a destination for the libraries (probably your Workbench Libs: directory) and click on proceed, the libraries will now be copied.



The installer utility is almost idiot proof.



The installer will also copy libraries to any destination.

At this stage the dearchived program(s) will be in the selected destination. Once you are used to

the above procedure you will find that it is very easy to dearchive any of the files on the disk.

## the archives

All the programs on this month's disk use the original archive name and due to the different conventions used, the names can seem a little obscure. Here is an at-a-glance list of all the archives on the disk:

- |                |                                     |
|----------------|-------------------------------------|
| ANGIE14A.LHA   | - Another Great Intuition Enhancer. |
| FMSYNTH.LHA    | - FM synthesis for your Amiga.      |
| GALACTOIDS.LHA | - Terrific Galaxians clone.         |
| HYPER117E.LHA  | - Hyper AmigaGuide reading tool     |
| MUCHMO36.LHA   | - MuchMore V3.6                     |
| SHOWGURU.LHA   | - Show what guru numbers mean.      |
| STEAMY10.LHA   | - Steamy Windows!                   |
| TLDMN21.LHA    | - Tools Daemon V2.1.                |
| VCHCK633.LHA   | - VirusChecker V6.33.               |
| WB-BROWSER.LHA | - Workbench browser.                |



# rdisk30

## libraries

This particular aspect of the Amigas OS can be a little confusing, especially for beginners. All programs interact with the OS and most need information and special routines which are not part of the ROM kernel. These routines are contained in files called libraries which are loaded into RAM at runtime for use by the program. So if a required library is missing or not found then the program will fail to run.

We generally provide the libraries that are required by the programs on the SuperDisk, and these can be copied to the libs: directory of your Workbench disk (or other bootable disk) if required.

Remember that the computer will always look for the libs directory on the disk that you booted up with, so if there is a problem with a program needing a library ensure that the library is present in the directory.

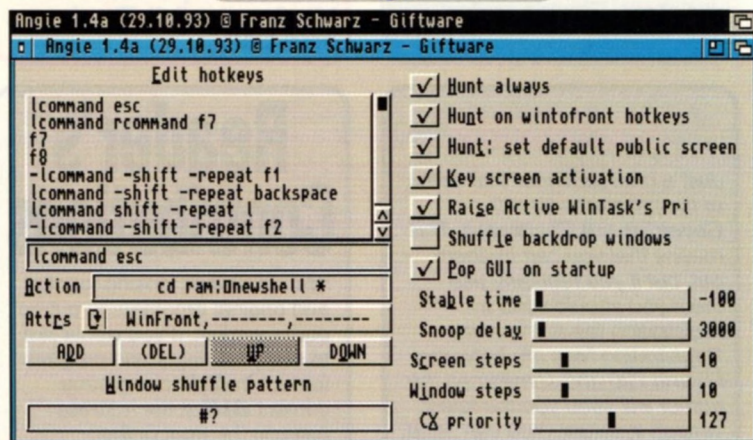
Finally, Workbench 3 has a number of new libraries which can't be used with Workbench 1.3, so don't try using them with the old OS. If in doubt, read the program documentation, since programmers usually put this information into their readme files.

## programs

There are 10 archives plus an ARexx article on the disk this month. Most, if not all, of the archives have a README (or equivalent) file which has been set

up to use 'more' if you double click on the icon. This will give you much more information about the program and its use so always read this file if you intend to use the program.

## angie



Enhance your Workbench with Angie's help.

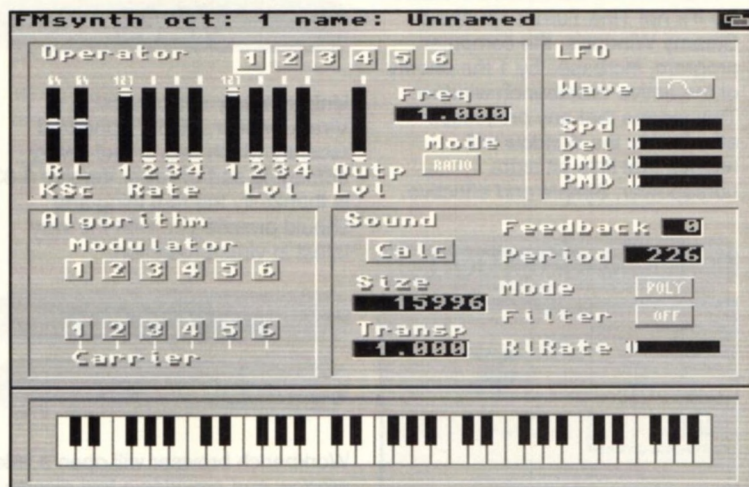
Angie is a fine Rolling Stone's song, Sharon's mum and the name of this excellent utility. It's Another Great Intuition Enhancer which has a lot of very attractive and useful features. Simply run the file ANGIE to get going, or, if you want to use it all the time pop it into your Workbench Startup drawer. Some of its features include auto pop-to-front windows and screens, increased active window priority and automatic relocation of active window. Lots of features can be tied to hotkeys and events, making this a very powerful

and flexible program.

## galactoids

Galactoids is, not surprisingly, a Galaxians clone. This is a cut above the other clones of this type that we've seen and that's why we thought it deserved to be on the disk, so that you, dear reader, can enjoy it as much as we have. It's no nonsense blasting, so grab your favourite stick and get down to some seriously nostalgic fun.

## fmsynth

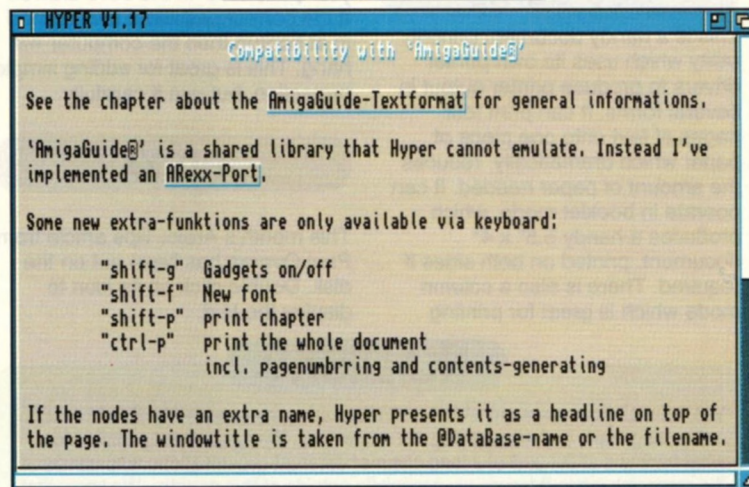


FMSynth is easy to use and great fun, so start experimenting!

This program generates FM synth sounds which can then be played using the QWERTY keys as a piano keyboard. FM synthesis was used by many of the early digital synths including the famous Yamaha DX7. FM synthesis uses a self modifying algorithm to produce very 'real' sounding instruments, and this program also allows these sounds

to be saved as 8SVX samples for use in other programs. The program itself is very easy to use and there are a large number of predefined sounds included to get you started. Please note, each sound must be created using the 'calc' gadget, this applies to the predefined sounds as well.

## hyper



Hyper is an AmigaGuide document reader, try it out on this month's GUIDE files.

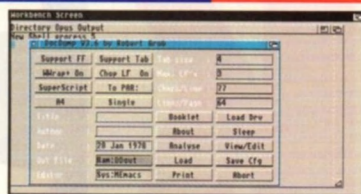
AmigaGuide documents are an excellent way of presenting information. The trouble is, a proper reader is required to decypher all the AmigaGuide commands. Multiview is the official Commodore tool for viewing AmigaGuide

documents but only Workbench 3 provides it as standard. So, what's needed is a Hyper. Now you can read with ease all those AmigaGuide documents that programmers seem to favour these days.



### muchmore

This is another text reader for all non-AmigaGuide documents. MuchMore is very well established and this is the latest version which offers soft scrolling and improved speed. Use the program in much the same way as more, by putting it into your Workbench C: directory.



Doc Dump provides several unique ways of printing documents.

program listings. A very useful program.

### steamy windows

No it's not Tina Turner I'm afraid. Steamy Windows, the computer program, increases by 1 the priority of the active Workbench window. This means that any processes attached to the Window will receive that little bit extra horsepower. Simple and effective.

### tools daemon



Tools Daemon puts all your applications within easy reach.

We are including the latest version of this handy utility. It allows programs and applications to be selected from the 'tools' menu bar, simply run the program and select TDPrefs from the 'tools' menu option to get into the preferences program. The operation and use of Tools Daemon can now be customized to suit your needs.

### doc dump

This is a handy document printing utility which uses its own printer drivers to produce printer output in several forms. It can print four pages of text onto one piece of paper which dramatically reduces the amount of paper needed. It can operate in booklet mode, which produces a handy 5.5" x 4" document, printed on both sides if required. There is also a column mode which is great for printing

### virus checker V6.33

Unfortunately a fake version of VirusChecker, V6.31, appeared recently which was in fact a very damaging sort of virus. Version 6.33 is thankfully the real thing and should provide you with the very latest in virus protection.

### workbench browser

Workbench browser will open a little window and provides a text display of the Workbench contents. Simply click on one item in the list to see what it contains. This is very useful for taking a quick walkthrough your disks and directories.

### password

This security-conscious device gives password protection to bootable disks. Put the executable file into the WBStartup drawer, or startup-sequence for 1.3 users and store your password in the devs drawer. If the correct password is not typed in at bootup then the computer will hang. This is great for adding simple protection, but use it carefully.

### arexx

This month's Arexx Tips article from Paul Overaa has been put on the disk. Double click on its icon to display the text.

## Faulty Disk?

In the event that your **aui** coverdisk fails to load (because of a read/write error etc), please return it to the following address for a free replacement. Allow 28 days for delivery.

**aui** Faulty Disks, 138 Lambeth Walk, London, SE11 6EW

Don't forget to include your name and full postal address in BLOCK capitals. Collector's tokens from the back of cereal packets are not required, thank you.

## Burning Chrome BBS

Thanks to Simon Gardner who helped us to obtain some of this month's programs. If you have a modem you can contact Simon's BBS on 0428 727060 (19.2K HST DS+ V32bis). This is not a voice number so you can't make funny noises down the phone! This is a modem only number!

### shareware

*Just a brief reminder that some of the programs on our Coverdisk are Shareware. This means that you can try them out, but if you regularly use them you should send a registration fee to the author. Registration fees are between £5 and £20 and sometimes the author will send you the latest version in return. You can send an International Money Order, or preferably a cheque but many authors don't accept cheques if they are outside the UK. If you want to risk sending cash in a registered post, it's up to you. We wouldn't advise it but it's your money...*

## Read the instructions!

If you get stuck with a program then you will probably find the answer somewhere in the documentation. Therefore it's best to read the documents on disk that usually accompany each program.

If for some reason you can't access the program documentation then either the default tool is not set to 'more' or there isn't any. To set the default tool to 'more' use the Workbench 'info' or 'information' option selected from the 'icon' pull-down menu.

Always check that the program you are trying to run is compatible with your machine. Also remember that if the program requires any libraries then you should re-boot from Workbench in order to use that program. Sometimes libraries will be on the Superdisk and these can be copied to your Workbench libs directory for use by the programs.

**If you get really stuck with the Superdisk then please write in to *aui* rather than telephone. Alternatively, hang on for the next *aui* since we will always report any problems in the following month's issue. If you do write then your letter will receive attention but please, no more telephone calls!! Thank you, have fun!!**

## Reader's Contributions

We are always looking for new and original programs to put on our coverdisk. If you would like to see your name and program feature in **aui** then please contact **aui** at the address given in the front of the magazine. Alternatively, give us a call if you think we would be interested in your program (071 487 4284 ext 1071). The shorter the better, under 100k including any libraries - unless it's brilliant! Compiled AMOS programs are welcomed.

## COMPATIBILITY

Angie, Hyper and Tools Daemon will not work with Workbench 1.3. Sorry, the only answer is to upgrade, you don't know what your missing!

## NO DISK?

Yes, consult your newsagent! But we've had so many complaints about readers not getting disks that we're trying out a new idea. We can't be responsible for what happens at the end of a long chain of different organisations who handle the magazine when it leaves us, especially outside of this country. We know that someone appears to be taking disks off copies of the magazine in some countries but we don't know whether they are being stolen or taken off as a protection against a large sales tax having to be paid.

So what we propose is this: if you live in the U.K. you will have to consult your newsagent and get him/her to contact the wholesaler etc in the usual way. However, if you are outside the U.K. we want to help you get the advantages of the SuperDisk so if you send us £1 in sterling (International Money Order etc) to cover postage etc and we will send you the month's SuperDisk. Okay?

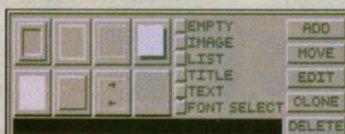


# INTERPLAY

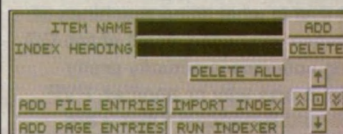
## THE ULTIMATE CDTV-CD32 AUTHORIZING SYSTEM FOR THE AMIGA

JOIN THE AGE OF MULTIMEDIA - From the authors of the best in Commodore CD multimedia productions comes Interplay, a system which puts sophisticated multimedia production in the hands of the creators and producers, not programmers. Interplay has been designed with ease of use in mind, reducing the time and cost of title production to the minimum. Quick prototyping and WYSIWYG point and click operation make Interplay the ideal tool for commercial producers of CDTV and CD32 titles, of any size. Interplay has been in use, at Optonica, for nearly two years, undergoing refinement over this period and now incorporating CD32 (AGA) support it is ready for release. The commercial possibilities for Interplay are demonstrated by the fact that it was used to produce PANDORA'S CD, INSIGHT:TECHNOLOGY and INSIGHT:DINOSAURS, titles acknowledged as being among the best available for CDTV and CD32. Interplay is totally optimised for CD production, save £1000's on production costs on a single project.

### PROFESSIONAL CD32 and CDTV TITLE DEVELOPMENT SYSTEM

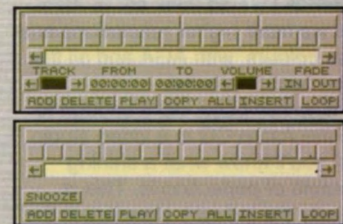
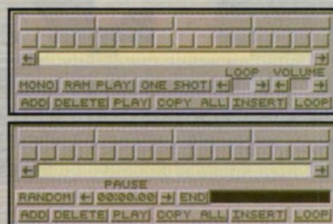
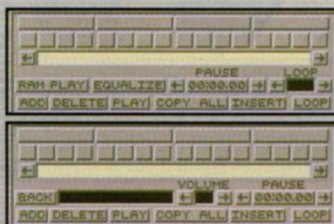
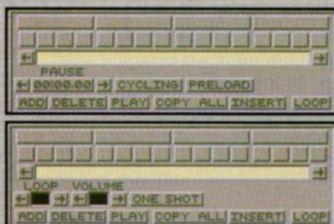


### PROFESSIONAL CD32 and CDTV TITLE DEVELOPMENT SYSTEM



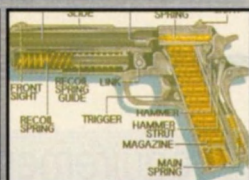
### FEATURES INCLUDE

'Point & Click', no programming knowledge required - Supports all Amiga graphics modes in PAL, NTSC, ECS & AGA, Amiga animations (ram loaded or disc spooled) - CCDA audio - 8SVX IFF sound samples (ram loaded or disc spooled) - SMUS and Soundtracker music files - ASCII text files - VAXL motion video - External program launches - Auto PAL/NTSC & ECS/AGA file seek and display for international titles - Text cross reference system - Multi team project imports - Use built in box/button styles or design your own - Sophisticated user selected list authoring - Built in page to page transitions - On line help system - Dynamic colour page remapping - Spool images AND 8 bit audio from CD simultaneously - Works with CDTV and CD32 controllers - Fully multitasking - runs under OS1.3, 2.0 & 3.0 - Supplied with runtime player, no hidden costs.



## INSIGHT:TECHNOLOGY

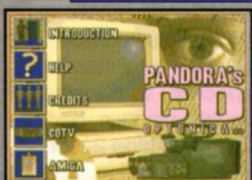
## INSIGHT:DINOSAURS



INSIGHT:TECHNOLOGY, lavishly produced by Optonica and published by Commodore gives a fascinating look at modern day technology with pictures, animations, photos, video, narration, text, music and sound effects, over 260 topics in all, every one with a wealth of multimedia material, bringing each subject to life as never before. Subject range from the ball point pen to the space shuttle.

INSIGHT:DINOSAURS is the second title in the INSIGHT series, a lavishly produced title rich in multimedia. You can be assured INSIGHT:Dinosaurs will be visually stunning and technically correct as the title is being produced in association with the British Natural History Museum, one of the worlds foremost centres of excellence in the field of paleontology. Also includes quizzes, puzzles and dinosaur paintbox.

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# MONTAGE 24

**N**ow we've had plenty of titling packages on the Amiga before: Pro Video Post, Broadcast Titler, Video Titler, Scroller, Scala...

The main reason that a lot of video studios initially purchased Amigas - and some still do - was because they were ideal for cheap (compared with 'pro' video equipment) video titling. Nothing else, just simple titling. The Amiga had useful video compatible output and reasonably high resolution screens.

CG means Character Generator and that is what titling machines or software are called. Most of the CG titling software is actually pretty good in one way or another. PVP Gold and Broadcast Titler 2 are both very professional and work well for high end titling. Scala is an excellent all rounder and multimedia product. Scroller 2 is a splendid and cheap and does its job.

But, for me, there isn't that one shining example of perfection. The Deluxe Paint of the CG world (or should that be 'Brilliance' instead of DPaint? In the next version of Brilliance I would think so...). Also now we have higher resolutions and more colours, with AGA and all the 24 bit boards around.

If you've been lucky enough to use the Aston CG in a video studio then you'll know what a shining example of perfection is. This is virtually the industry standard in the video world and for good reason. BUT, it's very expensive.

So let's try and use an Amiga instead. It's cheaper and it does a whole lot more besides. Not only that but we have the cutting edge of Amiga CG in the shape of Montage 24. Or do we?

SQUASH  
STRETCH  
SPREAD  
EMBLOSS  
FADE

The stunning effects available - but is it worth the wait?

**Barry McCarthy reviews a shiny new video titling package, which displays exciting effects. But is it too slow?**

## requirements

The first thing to bear in mind, is that Montage 24 does not run on a basic machine. The MINIMUM requirements are:

68020+ AGA Amiga or 68020+ Non-AGA Amiga with OpalVision or IV24, 1MB chip RAM and 8MB fast RAM, Large HardDrive.

And that's the minimum. Of course, as systems even in domestic use grow more powerful that may not seem much. And certainly if you are using your Amiga professionally your system would be equipped with this much and more.

Most packages are able to display text and transitions pretty quickly and changes and editing are also quite fast to complete.

Information on page layout and text sizes are simply applied to the named fonts, which doesn't usually take up a lot of disk space or time. Montage 24 takes a somewhat unexpected approach to titling.

## display

When you first load up the program, the display is not what you might call, well, err, very good? But worry not my little fruit baskets because all that glisters (yes, it is 'glisters' not glitters - I checked) as the great bard himself would have said, had he been reviewing Montage 24 for Amiga User International.

The display goes like this. You edit all your pages of text and backgrounds in what appears to be HAM6 lores. When you're happy

MONTAGE  
MCG  
version 1.0  
InnoVision Technology

Montage rendered montage.



# NATURE

## dance of the elements



Earth, Wind and Fire remixed by Montage 24.

with everything and want to see what your finished creation will look like, you press RENDER. And then you wait.

(I hate waiting every time I make a change. I can just imagine how I'm going to feel sitting in a video studio, trying to bang out

fifteen pages of text with backgrounds as the editor needs them. Hang on, hang on, I'm just waiting for it to render...)

But when Montage is finished, however, you end up saying, Wow! Because the final result is stunning. Wonderfully antialiased, with

## EASY ACCESS

### Cee Gee

For those untrendy people, who don't know what all these clever little abbreviations that only those 'in the know', know... we provide enlightenment!

It's amazing how often you walk into a video studio and find an Amiga of one sort or another, sitting around amongst tens of thousands of pounds worth of video equipment.

So why? Well, if we were in the good old US of A then you would most likely see an Amiga 1500, 2000 or 4000 right at the heart of everything. The reason being that it would contain the legendary Video Toaster. It is this alone that has kept the Amiga alive in the USA and made NewTek a vast amount of moola.

Back in quaint little England, oh, what the hell; Europe, we don't have Video Toasters because the PAL television standard is just too small to bother with... So the Amiga in the video studio is used for something else.

Whenever you make a video, whatever it's for, you will nearly always need some text somewhere. It might be titles, a heading, credits, stars or subtitles. The machine that puts this text onto tape is called a Character Generator or CG for short (just so no one else knows what you're talking about and they feel inadequate and at a disadvantage).

The important things that a CG must be able to do are:

- 1) Produce very high resolution text with NO jaggies, either by having an incredibly high resolution or by antialiasing the text. Antialiasing is the technique of adding intermediate shades of pixels around the edges of the letters, to make them appear smoother.
- 2) Choose from a very large library of industry standard text styles. The Toaster now comes with 300 standard styles. It's not a lot of good having wacky and weird text that no one can read or recognise. Most of the time, clients will choose text by name, like Helvetica, Times, Triumvirate... and expect you have it in your library.
- 3) Smooth transitions from page of text to another. Most of the time this involves line transitions, where, for instance, one line will slide off, to be replaced by a new one. Of course, you have to have teletype crawls and scrolling pages. Generally, fancy transitions are not especially useful. As long as everything is smooth.
- 4) Text needs to be quickly and accurately compositioned on the page. Styles such as shadows, 3D and outline/underline ought to be available.

Currently the Amiga CGs that do a reasonable job are Pro Video Post and Pro Video Gold, Broadcast Titler 2 (Super Hi-Res) and... Well, I suppose you could include Scala and a few others but really, there is not a program that does all of the above to high enough quality. The exception being the latest Toaster possibly.

beautiful gradations and effects. No kidding these are the sexiest titles I've seen on the Amiga, short of doing them by hand on a 24 bit display board.

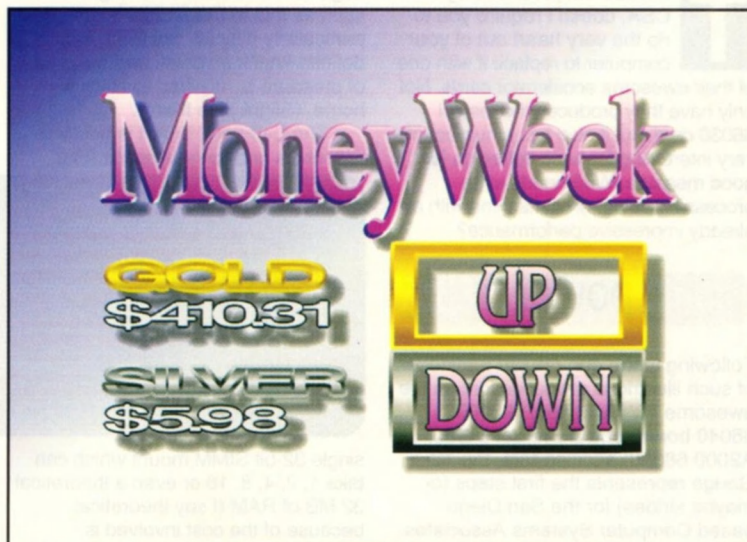
## fonts

Montage 24 comes with seven of its own format fonts. You can't use Amiga fonts at all but PostScript 1 and 3 fonts are available in a \$300

streak, bounce, zigzag... Most are page transitions. OK, they're good but not really what I was looking for. I need line transitions and scrolling credits. All the page effects can be done far more effectively on a DVE machine.

## conclusion

Montage 24 is a really odd program. The final results are stunning but it



All that glitters? I still don't get it.

upgrade module. But that's disgustingly expensive for something which should be an inherent part of the program.

The fonts can be scaled, stretched and placed in any way you wish, plus they can have several effects or attributes applied to them: Plain or Embossed face, Solid 3D sides in eight directions and Cast shadows also in eight directions. The colours of these attributes can be chosen individually and can also be either plain or smoothly graduated.

Other very agreeable features include the ability to generate boxes with embossing, bevelling and framing, also with various gradations in your chosen colours. Oh yes and there's the ubiquitous wallpaper repeat function.

Pictures can be imported as backgrounds but can't be scaled or moved. Shame.

Lastly, you can apply timed transitions such as fade, push,

takes soooooooooooooo long to get them. The amount of hardware needed is pretty large. Each page will need up to 1MB of disk space when it's rendered. And I would not use anything slower than a 68040 machine.

I can't quite see where this package fits in. It's certainly not a day-to-day CG. Perhaps it would be used for that special occasion, when a more zappy title is needed but then, wouldn't it be even more flexible to use OpalPaint or Brilliance?

Montage 24 is too hungry and too slow for my liking. It is a very expensive program to use and to buy. It does, however, produce beautiful title screens, better looking than any other package. If quality is what you are after and you think the results are worth the wait and the investment, then you should certainly give it a try. **a**

## INFO

Price: about £280.00

Contact:

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Perth Avenue, Slough

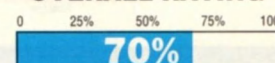
Berkshire SL1 4XX

Tel: 0753 551888

## Ratings: Out of 10

FEATURES	0 2 4 6 8 10
EASE OF USE	
PERFORMANCE	
DOCUMENTATION	
VALUE FOR MONEY	

## OVERALL RATING





# test drive

## Mike Nelson test drives an accelerator that provides a sensational boost for the A1200.

**T**his add-on, produced by CSA, doesn't require you to rip the very heart out of your computer to replace it with one of their awesome accelerator cards. Not only have they produced the fastest 68030 card, but it also has a number of very interesting features bolted on for good measure. Who needs extra processing power on a machine with an already impressive performance?

### power

Following in the gun-crazed footsteps of such illustrious predecessors as the awesome 40/4 Magnum (A2000 68040 board) and Derringer (A500/A2000 68030) accelerators, the 12-Gauge represents the first steps (or maybe strides) for the San Diego based Computer Systems Associates. The board itself comes in a number of forms to suit most pockets and the fully-fledged affair is a beast which melts the heart of of even the most miserable of computer-heads. In short, the A1200 is transformed from a glorified games console into a multimedia computer that rivals the A4000 in power, is almost portable and only differs in not having internal slots for Zorro cards. We will detail performance figures later, but as a rule of thumb, the 12-gauge spreads squelchy droppings over the A4000/030 and gives the 040 flagship a good run for its money, even outpacing that in a number of areas.

### installation

In common with most A1200 expansions, the 12-gauge slides into the trapdoor slot underneath the machine and locks securely onto the

edge connector there. Fitting boards such as this to the A1200 is not particularly difficult, but there is a definite knack involved and quite a bit of pressure is required to RAM it home. (Slight joke there).

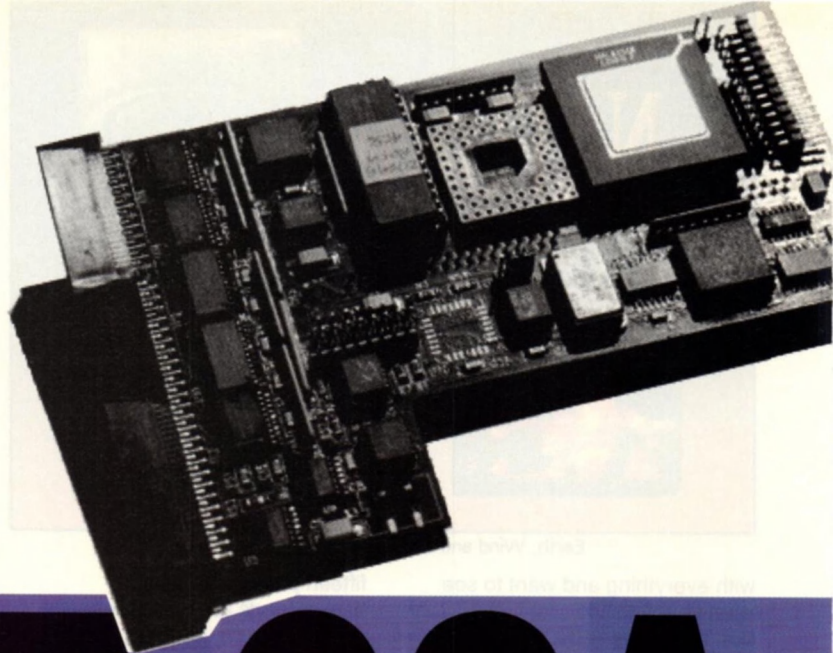
The L-shaped board is bristling with chips and there is space for a

single 32-bit SIMM mount which can take 1, 2, 4, 8, 16 or even a theoretical 32 MB of RAM (I say theoretical because of the cost involved is probably over the combined dosh for the entire Amiga range!).

This SIMM is stashed very neatly on the underside of the board and there is a connector to which the SCSI interface links. This is more troublesome to locate than the board itself, particularly if you have one of the early A1200 cases which doesn't have a cutout for plug. You have to run the ribbon cable under the floppy drive to the back of the case and either punch or drill out the hole for it. Not something for the faint hearted who like their guarantee to remain virgo intacta.

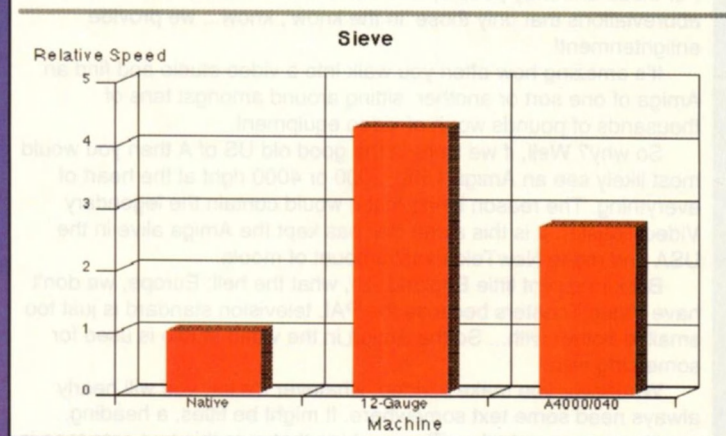
### configuration

Most people will buy up a board that is ready configured and in general the ROM on board takes care of the hard work. Mine simply boots up and the Workbench appears with a little less than 4 MB of FAST RAM in the title



# THE CSA

### Speed Trials



The sieve test shows the 12 gauge to be way ahead.

bar. A quick check of the system configuration reveals all is well and the processor is now a 50 MHz fully fledged 68030, with an equally awesome 68882 co-processor to deal with the number crunching and floating point stuff.

There is an area of conflict as going above 4 MB invades the RAM space allocated for the PCMCIA slot. This shouldn't prove too much of a problem for the masses who don't own such expansions, and let's face it, they are few and far between at present. Personally, I like the idea of more RAM anyway.

Speaking of RAM, there is a real problem with games and the 12-Gauge. Many of the current top titles will not run if there is a SIMM on the board. CSA are aware of this and blame the games programmers claiming they are confident that they have stuck rigidly to Commodore's guidelines for expansions.

Games programmers are notorious for not sticking by any rules whatsoever and removing the memory certainly cures the problem. At no time did any application software crash

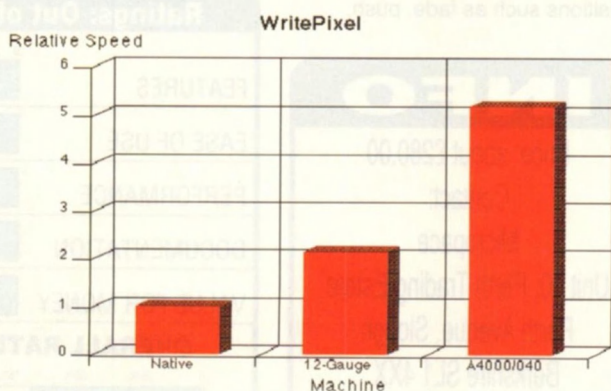
because of the board and I don't know if other manufacturers show similar problems. It does highlight the fact that there is no software mechanism for turning off the 12-Gauge to play games and clearly removing it is not an option.

There is a jumper on the PCB which can turn off the RAM and fitting a switch to this shouldn't prove beyond the wit of Man, but this kind of incompatibility really should be reserved for PCs and not Amigas. I don't know who is to blame, but it's a tricky point as most AGA games run on A4000's with their extended memory and 68040 processor.

### operation

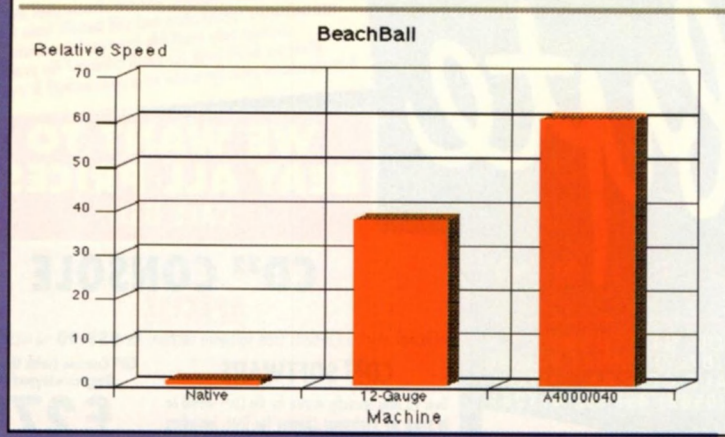
Once everything is in place, you just have to sit back and enjoy the ride. I've reviewed many accelerators since they were first invented and have to say that once you have one, it's hard to contemplate life before it as being possible. The A1200 is not a slow machine, until compared with a souped up version which is effectively

### Speed Trials



The write pixel test shows that the 12 gauge is quite away behind the '040.





And here, the 12 gauge is only slightly slower at beachball drawing.

Screen updates in ProPage are bearable and 3-4 times quicker than usual. The biggest advantages are in the 3D graphics rendering programs like Imagine, Real 3D or, dare I say it, LightWave 3D. Those mind-numbing waits while a scene is generated are cut from hours to minutes as the co-processor whizzes its way through all those equally mind-numbing calculations.

## options

Most people reckon that putting an IDE interface on the A4000 was the worst mistake since Atari said "Oh, we don't really want the Amiga, we can build our own" and everyone knows SCSI is much better. The A1200 also has an IDE interface but this is not such a bad

large external hard drives and also removable devices such as a Syquest or even CD-ROM. This luxury is a very expensive option on the A4000 and although only the SCSI-I protocol is supported, this is going to be more than adequate for the foreseeable future. SCSI-II is around, but generally only on the most expensive of drives.

Another sneaky move is including an option for networking Amigas together, something vital in the film industry where "render farms" consisting of a stack of Amigas are used to share the considerable workload. CSA are about to release a Zorro-II board and the appropriate software (Envoy, from Commodore) and the A1200 will have a cheap and fast Arcnet system.

Both of these are expansion options which means you only pay for them if you want them, but it is a great piece of design and planning to enable this flexibility to exist.

## conclusion

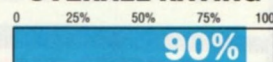
The A1200 with an accelerator is a dream to use and they don't come any faster than the CSA 12-Gauge. CSA have a long and distinguished history in making "go faster" Amigas and their experience shows in this product. The "manual" is still a pretty inadequate photocopied affair that would make GVP laugh hysterically, but there is just enough there to get you up and running.

Aside from the irritation with games programs, the 12-Gauge performs flawlessly, enhancing the Amiga 1200 to an extent it can be considered a new machine, opening new avenues. Second only to a hard drive, an accelerator is almost obligatory for serious users and the 12-Gauge is the fastest and most highly specified available to date - it's simply a case of you get what you pay for and quality costs. This board is worth it if you want the performance of a 4000 without losing your investment. **a**

### Ratings: Out of 10

	0 2 4 6 8 10
FEATURES	<div></div>
EASE OF USE	<div></div>
PERFORMANCE	<div></div>
DOCUMENTATION	<div></div>
VALUE FOR MONEY	<div></div>

### OVERALL RATING



## Info

Price: 1 MB £589 4 MB £699  
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A 50MHz FPU will cost an extra £100.00

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83 Railway Road  
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# 12 GAUGE

five times faster at everyday tasks. Extra RAM makes it feasible to run programs like Scala MultiMedia and Brilliance now functions with more than two bitplanes on a low resolution screen. ProPage 4.0 fires up in all its AGA glory and, hey presto!, you have a very mean computer under your fingertips. Very mean indeed and unless you specifically want slots, it's very tempting to recommend an A1200 plus 12-Gauge instead of a 4000.

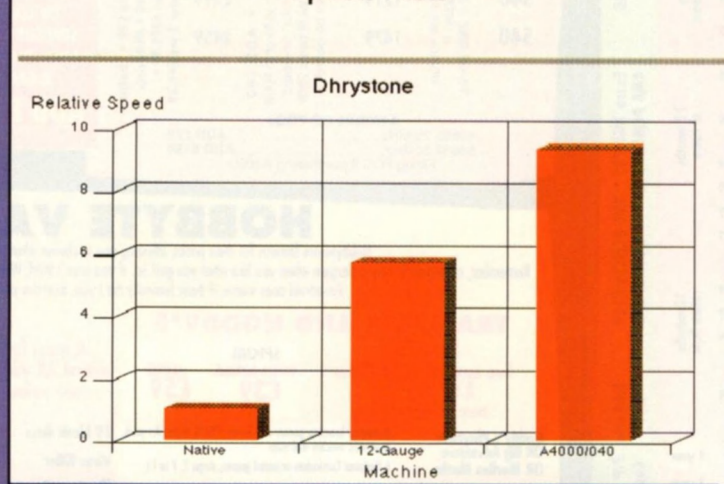
A 50 MHz board does run incredibly hot and locating the main chips facing outwards means your desk acts as a giant heatsink for the board, rather than sending the energy out through the top of the A1200 via the keyboard or drives. I ran the machine fully laden all day and didn't experience any crashes or hiccups due to overheating. Enough said.

The performance graphs speak pretty much for themselves. As usual I would advise you to look carefully at your specific requirements and at the applications you want to run before deciding. Benchmarks can be misleading as the test code is

generally unrepresentative of the real world applications and the general speed increases are of the order of 4-5 times at doing operations like perspective brushes in an art program.

idea as the cost in adding a hard drive is much reduced. However, adding SCSI to the 12-Gauge is a master stroke, as the now beefed up multimedia mega machine needs to be able to access

### Speed Trials



The standard 1200 is made to look very under powered.

## Easy Access

**68000:** First in the series of 16/32-bit processors. The early Amigas ran at a measly 7.14 MHz.

**68020:** This is the processor chip in a normal Amiga 1200. It runs at 14.2 MHz.

**68030:** A very powerful big brother to the 68000, comes in various speeds, usually 16, 25 or 33 MHz, but a 40 MHz version is coming soon.

**68040:** Currently the flagship processor. Has the floating point stuff built in. An awesome beast of a chip.

**68881/2:** These are number crunchers, chips dedicated to

mathematical procedures and controlled by a 68030 in this case. Programs have to be specially coded to utilise these chips. Can get up to 50 MHz.

**Cache:** The 68030 has a kind of internal RAM setup to store small chunks of code and data. So, it does not have to access RAM to execute such code and can run it blisteringly fast. The 020 has a smaller version.

**Clock speed:** Determines how fast the system runs. Everything in the computer is precisely timed (by an oscillator circuit) and the higher the rate, the more instructions are executed in a given time (ie. more work gets done). Measured in Mega Hertz.

**IDE:** Integrated Drive Electronics. A standard type of hard drive interface popular in PCs because it's cheap. Not as flexible or fast as SCSI.

**MIPS:** Millions of Instructions per Second. A measure of how fast is your machine - an 040 will manage around 20-30 on a good day.

**SCSI:** Small Computer Systems Interface. A neat way of connecting all manner of devices to the Amiga (and other machines). Things like hard drives, scanners, printers and other storage media. Nice because you can daisy chain up to 8 devices onto one interface.

**Zorro:** The Amiga's interface protocol for internal slots. The A1200 doesn't have any.



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HD SIZE MB	1+1MB SUBTRACT £70	2+2MB STANDARD VERSION	2+4MB SUPER EXP. VERSION	2+4MB
80	WARNING: 1 + 1MB A4000s will not run most serious AGA sw packages. If required, subtract £70 from 2 + 2MB prices	965	ADD £80 • ADD £80 • ADD £80 2 + 4 MB version comes with 2MB chip RAM + one 4MB chip of fast RAM, for on-board expansion to 16MB. We do not fit two x 2MB chips of fast RAM, which gives on-board expansion of only 8MB.	1889
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Frankenstein @ Captain Planet  
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Edd the Duck + Stick Up + Lemmings 92% AF  
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Bart Simpson  
Spiderman/Capt America @ @  
Rcade Trivia  
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With 9600 Fax, 2400 Data Fax Software, Atalk 3

Comms S/W, Modem Leads & Power supply

**SUPRA 2400+ FAX/MODEM**



**T**he Amiga is often derided by its PC-head critics as a wimpish games machine with nothing to offer the "serious" user. But, as enlightened ones, we are all better informed and clearly must regard this as a bogus opinion held by people who know no better. The truth is that the Amiga can process words, store records and spread sheets with the best of them.

Professional Calc has been reviewed previously and this upgrade is essentially a spiffing new version that supports the AGA graphics of the A4000 and A1200 series of Amigas. There are a number of other enhancements to what was a ground-breaking original.

## spreading sheets

Way back in the heady days of the Vic-20, when the Amiga was a twinkle in the eye of Jay Miner, a program called Visicalc hit the streets and jolly revolutionary it was, making its developer - until then living in a shack way out west - a stack of money larger than an elephant on tiptoes.

This "spreadsheet" provided a means of modelling numerical data on the computer, allowing a simple "what if" analysis to be carried out. All the variables could be entered and formulae to perform mathematical functions applied at the press of a button.

A simple example might be in calculating the effects of a loan. The variables are the total amount, interest rate, and duration, so a monthly balance could be calculated and plotted. So what? You don't need a Cray-1 to do that - people have had loans for much longer than computers have been around (take it from one who keeps the banks' snotty letters army busy).

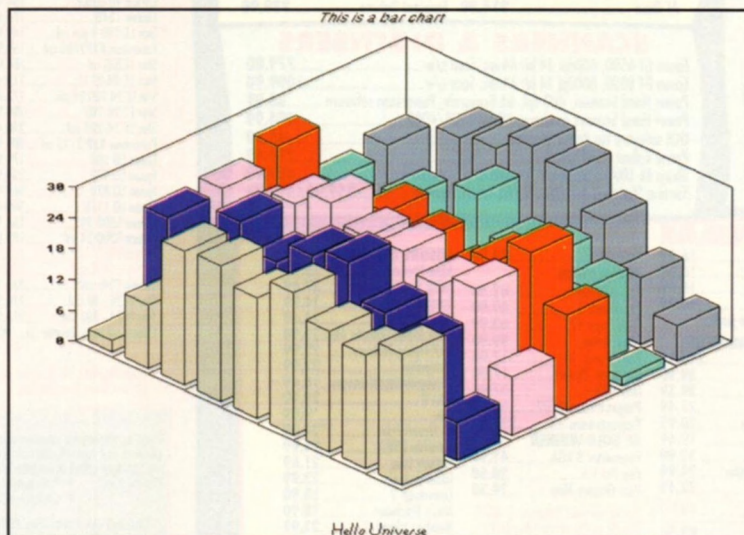
Suppose you make a few changes and additions, complicate matters a bit by throwing in a variable deposit, an interest rate that is not constant, and things start to get a bit much for the back of the envelope. The spreadsheet starts to become more attractive once the going gets a bit tougher.

# PRO CALC 2.0

**Mike Nelson examines a**

**professional level "What if?"**

**package from Gold Disk.**



Bar charts are one ProCalc function that helps to enliven dull figures.

The PC world has been lucky in having some very powerful spreadsheets such as Excel and the famous Lotus 1-2-3, but it is only really with the advent of ProCalc that Amiga users have started catching up. Even now, though ProCalc is a long way off the aforementioned products and the Amiga will always lag behind in productivity software, not from a technical viewpoint as the Commodore machine is more capable than the PC in virtually all departments, but in simple economic terms there aren't nearly enough of them for the big guys to warrant porting their products.

This negative gloom and doom stuff needn't distract you from using the Amiga for data analysis. As, with its intelligent operating system able to cope with MSDOS format disks, and ProCalc's ability to import 1-2-3 files, you can easily take files from the office and work on them using an Amiga - any Amiga, in fact, with 1 Mb of RAM, but a second floppy or preferably a hard drive is highly recommended.

The user interface on loading ProCalc is pretty familiar for spreadsheeters with the usual rows and columns of data, and a pile of icons along the top to simplify the mundane editing type of things. The

ability to move the icons where you want, or even generate icons for menu items would be nice, but this user definable interface is a big step not seen much in the world of the Amiga. For the time being, however, the chosen one is perfectly sound.

**Once your figures are**

**in, the fun starts as you**

**can apply any of 130**

**different functions to**

**your data.**

Entering data is pretty straightforward with ProCalc and there are a number of functions for generating data automatically. Once your figures are in, the fun starts as you can apply any of 130 different functions to your data. The usual mathematical ones such as SUM, AVG, SIN, PI etc are complemented for example, by a set of finance-specific functions that deal with interest and other such exciting stuff.

Other interesting functions are some simple statistics, trigonometry, database and string handling functions, and also some useful functions for dealing with time calculations.

## macros

What if the 130 functions do not quite provide what you are looking for? Maybe some high powered statistical calculation, or a repetitive sequence of keypresses like typing the months of the year. Enter the Macro and wonderful world of ARexx.

Macro Mode is a kind of learning mode where the computer remembers your keypresses and saves them to a disk file, allowing you to recall them easily. You can do anything you like, record it and simply assign the macro to a magic key. Easy, except mouse movements aren't catered for, but most of the things you need are achievable via the keyboard.

ARexx is one weapon in the Amiga's arsenal against the PC/Windows business and although tricky to get started, is incredibly powerful. ARexx allows you to put in what the programmer didn't - I mean they can't be expected to think of everything, can they?

Weird scientific statistical calculations are usually only found in specialised software but with a bit of imagination you can write a program using ARexx to perform them for you within the environment of ProCalc. You can also use ARexx to link different programs such as ProPage to the



spreadsheet so passing data is a cinch. Only Amiga makes it possible, as the phrase used to go.

## graphs

Spreadsheets are good for calculating numbers, but this is not enough these days as you have to be able to display them in a meaningful way for everyone to enjoy at a glance. These days, the business world out there requires multi-coloured, three dimensional

**The graphs are actually**

**quite powerful and**

**relatively easy to use.**

confusograms, with a plethora of nice fonts and wondrous graph types. ProCalc provides the main things you'd want, but not much more. Personally I prefer the graphing facilities of Oxix's Presentation Master, but that's just me. ProCalc does generate EPS files for PostScript lovers and some incredibly useless Professional Draw Clips - a pie chart has so many points that it's virtually unmovable!

The graphs are actually quite powerful and relatively easy to use, with bar charts, pie charts, and line graphs supplying a myriad of display options to get your message across.

## ideas

OK so it wouldn't put Superbase out of business, but some quite useful

nically implemented should you require an alphabetic list.

Ideas processing is a grandiose title for turning a list of points into an essay or article. You would enter your ideas as a list, making sub headings until you have covered everything. ProCalc also links to Gold Disk's TransWrite word processor, itself nothing desperately special, but the hotlink is convenient.

## version 2.0

So what's new about the upgrade?

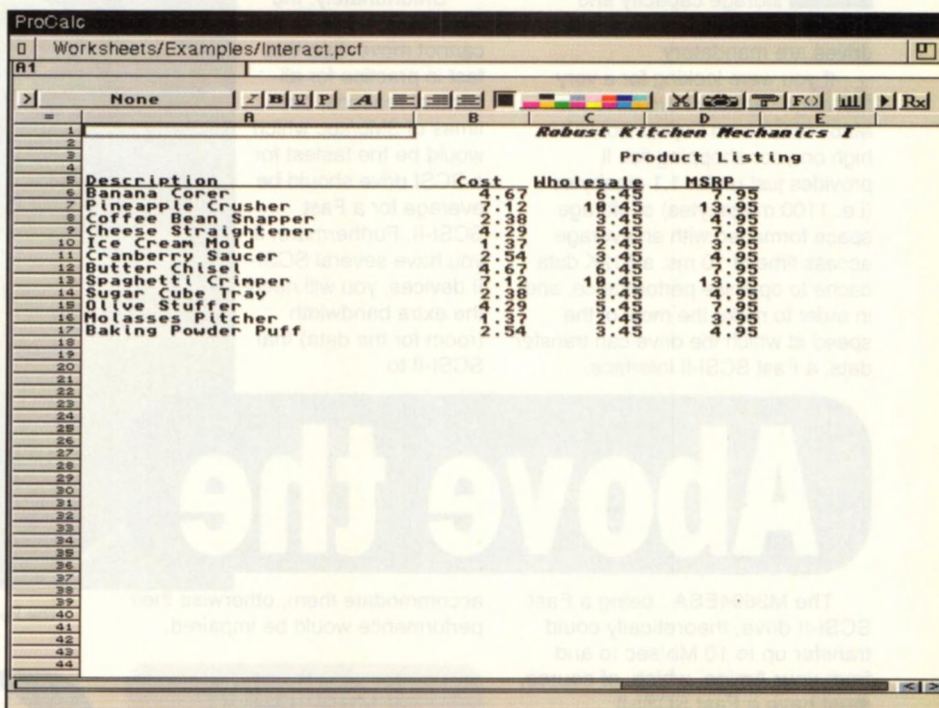
Supporting the AGA chips and screen mode selection system of the 3.0 OS is about the best feature. And although having 256 colours available isn't the most earth-shattering of experiences for spreadsheeters, the more artistic among them will have fun with the graphics. The user interface doesn't seem to cope too well with this influx of technicolor, having only 16 icons available at once, but that's life.

Modes like productivity are quite popular among applications users, so this support is handy. You can't realistically expect to use low resolution screens for running ProCalc, but it actually works, if a

than using the windowing system as all the data is ready to be scrolled into view; menus cause the screen to snap back to the top left, as one would expect.

The database sort has been improved to work in either ascending or descending order, and as another life saver, you can now

Kuma's K-Spread 4, itself a nice product but not on a par with the Gold Disk heavyweight. ProCalc is simply the leader in a field with very few competitors; it has a number of relatively minor flaws and some glaring omissions like online help, but it is evolving rather slowly it has to be said. The AGA support is



Procalc's user friendly interface.

load and save chart definitions so you don't have to go through all the menus and requesters to get the job done. The earliest data allowable has also been altered to January 1900 rather than 1978 which could be a bit painful for older users trying to dig the dirt on yesteryear.

## missing

Online help via the AmigaGuide is a real must for a serious application these days - it should be there as it does help the user immensely. Oxix include it in their products and so must people like Gold Disk as users rightly are expecting to see it there. I did whinge about the way in which ProDraw clips are handled and the pie chart is especially irritating. It takes very few curves to describe one, yet ProCalc uses literally hundreds, rendering the clip almost unusable as it takes so long to move it around.

## conclusion

ProCalc is without doubt the leading Amiga spreadsheet with the only serious competition coming from

welcome and well-implemented. Altogether a highly competent product and a worthwhile acquisition for anyone who wants to use a really professional calculating tool on the Amiga. **a**

## INFO

Price: about £79.00

Contact:

Meridian Software

East House

East Road Trading Estate

London SW19 1AH

Tel: 081 543 3500

## Ratings: Out of 10

FEATURES

EASE OF USE

SPEED

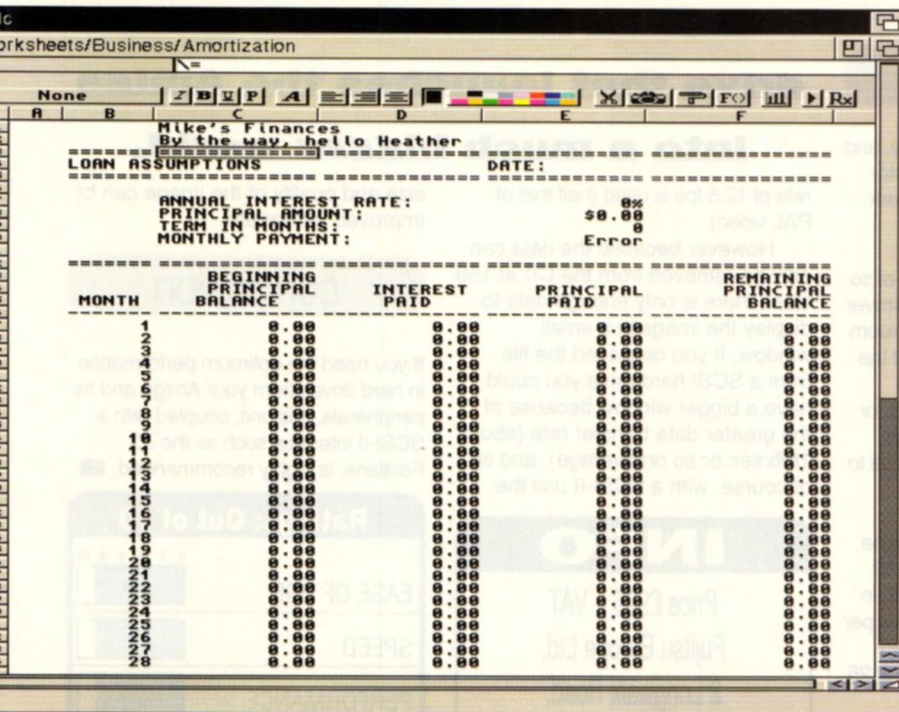
PERFORMANCE

DOCUMENTATION

VALUE FOR MONEY

OVERALL RATING

78%



People used to spreadsheets will feel at home with ProCalc's wide range of facilities. database functions are provided by ProCalc. For instance, a simple phone book would be easy to generate and the sort functions are

little taxing on the menu system.

Extended screens are also allowed so you can set your screen up to be much larger than the display and scroll around it all really quickly - this is often much quicker

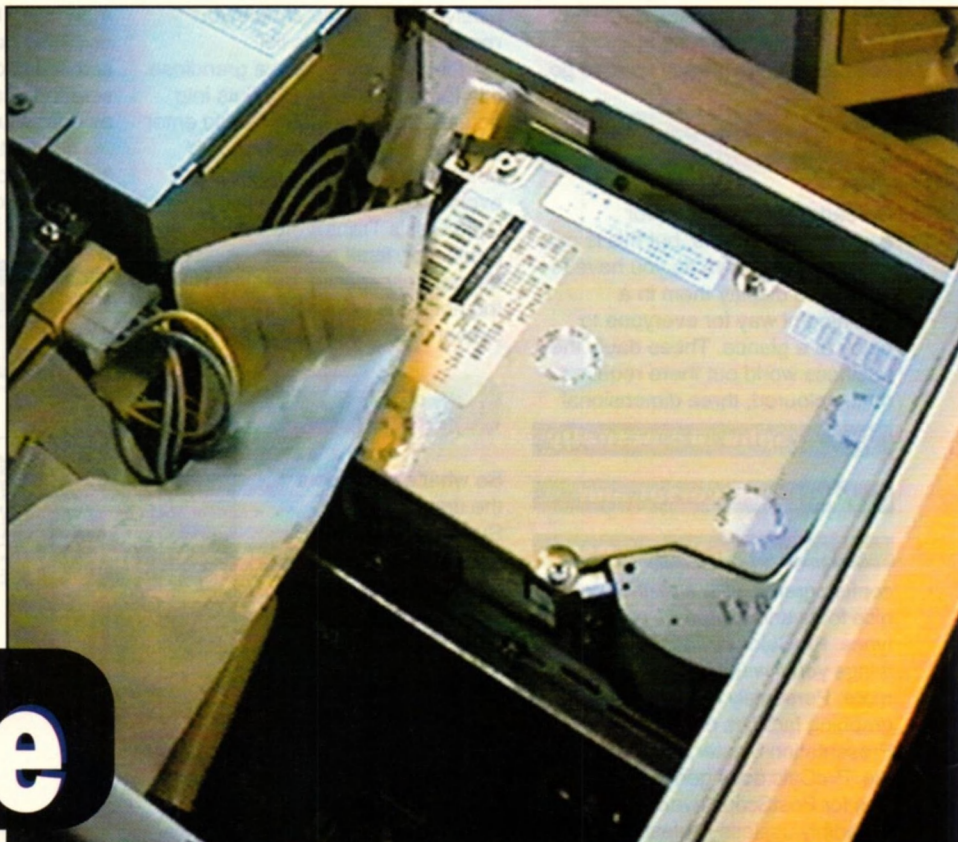


**A**s the Amiga advances, particularly in the field of multimedia, greater storage capacity and enhanced performance from hard drives are mandatory.

If you were looking for a very fast large capacity hard drive the M2694ESA from Fujitsu would be high on your shopping list. It provides just under 1.1 gigabytes (i.e. 1100 megabytes) of storage space formatted with an average access time of 10 ms, a 512K data cache to optimise performance, and, in order to make the most of the speed at which the drive can transfer data, a Fast SCSI-II interface.

(although apparently the Z3 FastLane will shortly).

Unfortunately, the drive mechanism cannot move data that fast in practice for all sorts of reasons, but times of 3Mb/sec which would be the fastest for a SCSI drive should be average for a Fast SCSI-II. Furthermore, if you have several SCSI-II devices, you will need the extra bandwidth (room for the data) that SCSI-II to



The Fujitsu drive fits into the 5" bay of the 4000 with the use of an adaptor.

## Above the

The M2694ESA, being a Fast SCSI-II drive, theoretically could transfer up to 10 Mb/sec to and from your Amiga, which, of course, must have a Fast SCSI-II controller.

accommodate them, otherwise their performance would be impaired.

### installation

The drive is a 3" unit which I fitted in the 5" bay of my A4000 using a £5 conversion kit, and connected it to the Z3 FastLane Fast DMA SCSI-II controller. It is not a low profile unit, so you cannot install it in the rear hard drive bay above the factory-fitted IDE unit.

### performance

The unit has performed flawlessly, and in operation certainly appears faster than the IDE unit. Some benchmark tests I ran confirmed my general impressions.

Aside from having the luxury of so much storage space so I'm not forever backing up applications to make room for new ones, only to have repeat the process when I need to run them again, this hard drive really excels for projects that need to transfer large amounts of data from the hard drive to the computer's RAM as fast as possible.

A good example of this would be digital video. An overscanned 24 bit video frame is approximately 1 Mb in size. Video frame rate is 25 frames per second (fps), so your Amiga would need to retrieve and display data at 25 Mb per second to play back.

The best example of this would be playing a digital video file. You may well have seen some of the CDTV titles that use motion video playing in a small window on the screen. To obtain an image that gives an acceptable impression of motion a video frame

## Gigabyte

**Andrew Gould reviews the Fujitsu M2694ESA, a hard drive that launches the Amiga into a much bigger world.**

rate of 12.5 fps is used (half that of PAL video).

However because the data can only be retrieved from the CD at 150 k/sec there is only enough data to display the image in a small window. If you displayed the file from a SCSI hard drive you could have a bigger window because of the greater data transfer rate (about 1Mb/sec or so on average), and so, of course, with a SCSI-II unit the

size and quality of the image can be improved further still.

### conclusion

If you need the optimum performance in hard drives from your Amiga and its peripherals, this unit, coupled with a SCSI-II interface such as the Z3 Fastlane, is highly recommended. **a**

### Fast SCSI

**Why Fast SCSI-II?** SCSI-II is an enhanced version of the original SCSI (Small Computer Systems Interface) command set, a method used by a computer and its peripherals to transfer data to and from each other.

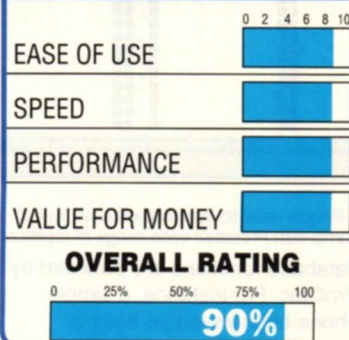
The original SCSI command set offered high speed bi-directional data transfer of about 2-3 Mb/sec (synchronous), and permitted up to seven devices to be daisy-chained to the computer. However, nothing stands still for very long in the computer world, and, of course, the performance of peripherals, hard drives in particular, have improved considerably. Thus one of the enhancements made in the SCSI-II command set was to allow a data transfer rate of up to 5 Mb/sec. If this weren't enough (it never is), the "Fast" option allows up to 10 Mb/sec. There is also another option, "Wide", which uses a 16 bit rather than 8 bit burst and can support up to 20 Mb/sec and sixteen devices.

There are also two Wide SCSI-II versions of the drive, the M2694-EQA and -ERA (this is a differential drive, designed for mini and mainframe system - real power!). However, they are only of academic interest since there are no SCSI-II controllers for the Amiga that support the Wide option yet

### INFO

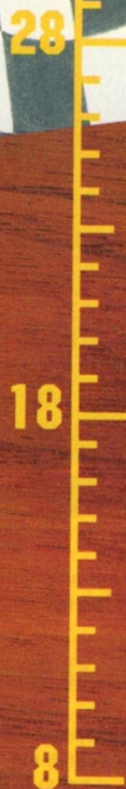
Price £995 + VAT  
Fujitsu Europe Ltd,  
2 Longwalk Road,  
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# test drive ACCUTRANS

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converts files to other  
formats?**

**Barry McCarthy test  
drives a product that  
makes it easy.**

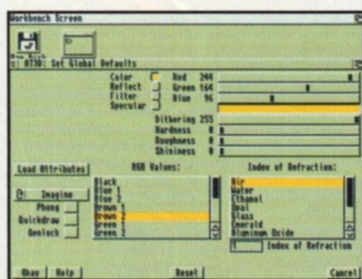
# 3D

**T**he big CAD package on the PC has always been AutoCAD from Autodesk, Inc. AutoCAD also exists on the MAC. So Autodesk developed a 3D eXchange Format that would be easily transferable between different platforms. DXF. This is a standard ASCII text file that describes the 3D design. The advantage of text is that it is very portable. Any computer can read an ASCII file.

Excellent! Now all we need to make sure is that all 3D programs can import and export DXF format objects, but it is only recently that the Amiga community has embraced this idea. In fairness, 3D Professional did have DXF import but it rarely worked well and who's seen 3D Professional for sale recently?

Real 3D 2 has DXF in but no out. Pixel 3D Pro has a DXF converter which is so full of bugs, it makes me scream and stand on stools (the wooden ones). So...

Along comes a cheap and unassuming product, with no announcement and from a company with a less than serious name. MicroMouse Productions in Canada. It's called AccuTrans 3D and its main job is to convert DXF files in or out.



The online help facility makes life easier.

gadget too. No, it doesn't adjust to different WB resolutions, which is kind of a shame but doesn't bother me.

For most sessions, you won't need the manual, as it has a superb on-line help system, including instructions for import and export always displayed on the interface. This is brill. Even EVERY requester that opens has its own help. Every program should have this. I know, PIRACY; that's more than likely what stops most programmers from including this sort of thing. It is nice though.

## formats

AccuTrans 3D supports the following formats:

DXF Revision 10/11+. Imagine/Turbo Silver 3.0. LightWave. Videoscape/Modeller 3D. Sculpt 3D/4D. I'd like to see someone attempt a Real 3D converter some day. Tricky, I know.

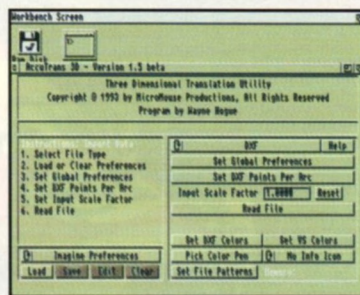
Anyway, everything I threw at it, loaded and converted without a problem. This alone is somewhat attractive compared to the opposition.

Along with the basic converting, there are some interesting options, especially for DXF format. These include the choice of layer and block inclusion/exclusion (if you know anything about layers and blocks, this



You get everything including the kitchen sink from AccuTrans 3D.

will be very useful. If you don't, then you probably don't need it. Anyway, there's an explanation in the manual). Other options include an excellent scaling and centre placing requester. This may not sound very useful until



Load it up and off you go.

you try to convert a DXF building into Imagine and find that the original was measured in Millimetres. It's now over a million Imagine units long and at coordinates of 54,789,234 x 19,138,902. This is an illegal object, as far as Imagine is concerned. Luckily AccuTrans enables the object to be scaled and centred automatically or manually. Phew.

You'll find that most 3D programs use a FINITE universe with very strict limits. AutoCAD seems not to. One thing about this whole area, DXF seems to be a little difficult to scale and centre at times. What does a measurement of NaN0.0000 mean? I suspect it means that the measurements are simply too large for the program to cope with? A small bug perhaps, or maybe a bug with my DXF file. It doesn't seem truly to follow the DXF standard to the letter.

So what's missing? Well, I suppose I would quite like simple editing functions. Select/delete/move points. Along with this, would be a Tri-View or Quad-View. It would be

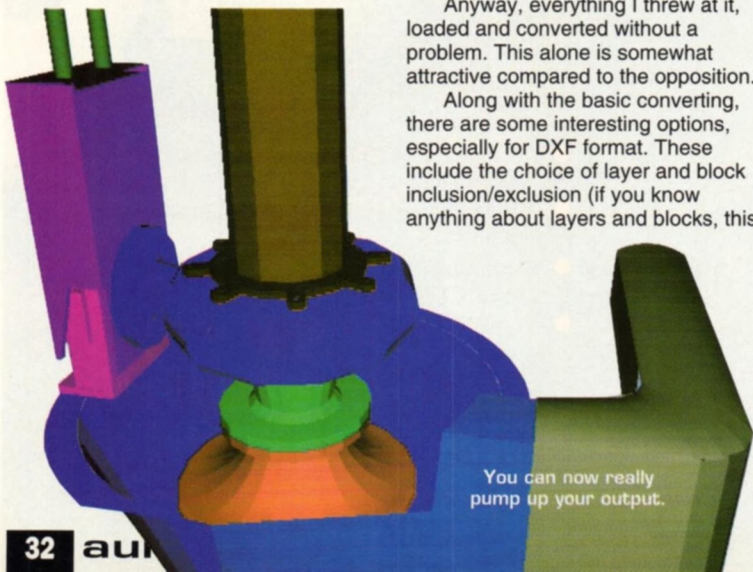
nice to have a Real 3D import/export. Apart from that, I'm very happy.

## conclusion

Finally there is a reliable link between Amiga 3D and everything else 3D. AccuTrans 3D is being sold as the 'premier' Amiga DXF converter. If you need to convert any DXF files to or from Amiga or if you need a cheap object converter that formats and works without a hitch, then BUY IT. **a**

## on-line help

It loads on Workbench at about NTSC size and it has a quit gadget and a zoom type thingie, zooming the window between two sizes; full size and a little bar. There's a depth



You can now really pump up your output.

## Info

Price: US \$60 (about £40)

Micromouse

847 Athol Street, Rigine SK

Canada, S4T 3B6

Tel: 0101 306 522 6077

## Ratings: Out of 10

FEATURES

EASE OF USE

PERFORMANCE

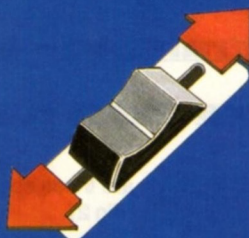
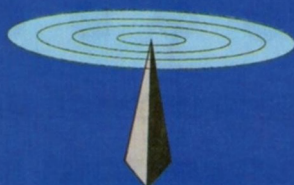
DOCUMENTATION

VALUE FOR MONEY

## OVERALL RATING

0 25% 50% 75% 100  
**90%**





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**H**elm, from Eagle Tree Software, is the latest addition to the burgeoning ranks of multimedia authoring systems - programs designed primarily to help non-programmers create their own custom multimedia presentations and interactive applications without the major problems of complex program writing.

Examples of these programs include AmigaVision (Commodore), CanDo (Inovatronics), Hyperbook (Gold Disk) and Scala.

Although these programs may be used for similar purposes, they all have quite different interfaces and capabilities. For example, Scala MM is superb for creating slick presentations quickly and easily, but has no direct support for hypertext. CanDo, however, does support hypertext, but has no screen transition effects and quite a steep learning curve for the newcomer.

Helm, as we shall see, has many of the most important

(Helm applications), one of which is an illustrated interactive guide to the program. There are 23 in total, some or all of which can be installed on a "bookshelf" and studied at your leisure. (Fig 1).

A book could be a simple address program, a directory utility, a customised paint package, or a full blown interactive multimedia system that displays pictures, animations, plays samples or CD audio (if you have a CDTV or A570 equipped A500), incorporates a hypertext facility, as well as controlling external devices such as MIDI systems, genlocks, and video sources. It's that versatile.

## system

Helm will run on any Amiga with one megabyte or more of memory, and with Kickstart 1.3 or greater. If you have an AGA machine you can take full advantage of all the



Helm's bookshelf, configured to run the sample books supplied. As you can see there are quite a few (28) covering a wide range of possible applications. These books are a useful source of ideas and include some handy objects to incorporate into your own projects.

attributes of the current crop of existing programs and combines them with some unique features of its own to provide what is probably the most comprehensive integrated multimedia authoring system available.

screen modes. It does not require any special libraries, has a freely redistributable runtime player, is not copy protected and is a dangle-free product!

## six disks

Helm is supplied on six floppies accompanied by an enormous 220 page manual and is installed easily on your selected hard drive partition.

Just in case you were wondering why an authoring system requires six floppies, most of these are taken up with a diverse range of sample "Books"

## approach

The authors describe Helm as "object orientated" and "data aware". While these terms are not used in the strict programming sense as for languages such as C++, building applications in Helm, in particular with its scripting language, is very much centred on objects and the information (data) they contain.

# HE

**Andrew Gould test drives a new program that makes putting together a program - or a programme - more a pleasure than a pain.**

## books

Each book comprises one or more forms, which in turn may be comprised of one or more pages. The pages are the actual screens with which you interact when using your book.

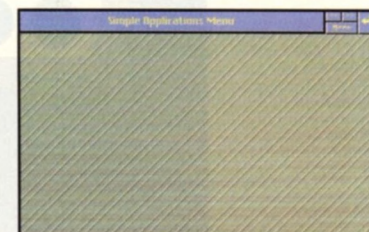
The resolution and palette of a form determines those of its component pages. So if your application requires different palettes or resolutions, you must create separate forms.

Aside from determining the display characteristics of its pages, a form also serves as a page template. Objects that will be

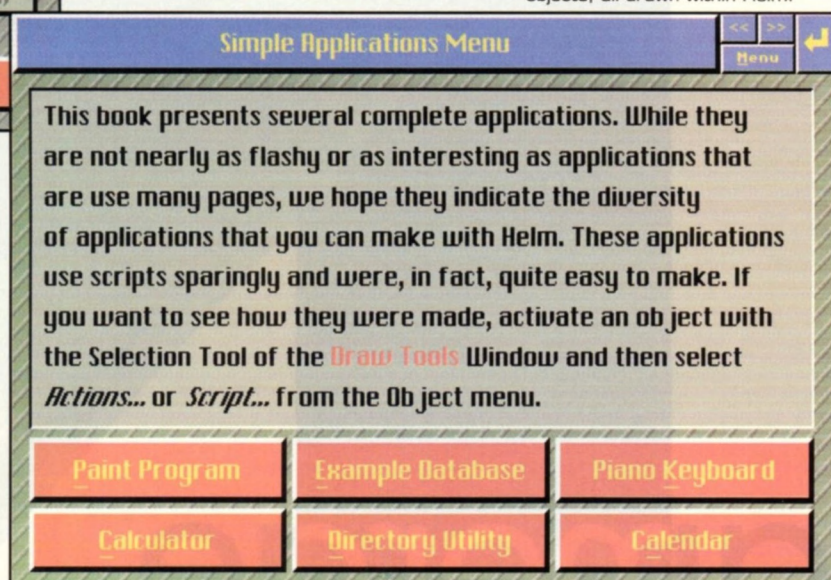
are those special to each page. (Fig 2)

## objects

One of the key features of Helm is the concept of shared objects. Imagine that you wish to design a



its parent form template, comprised a background, title bar and control objects, all drawn within Helm.



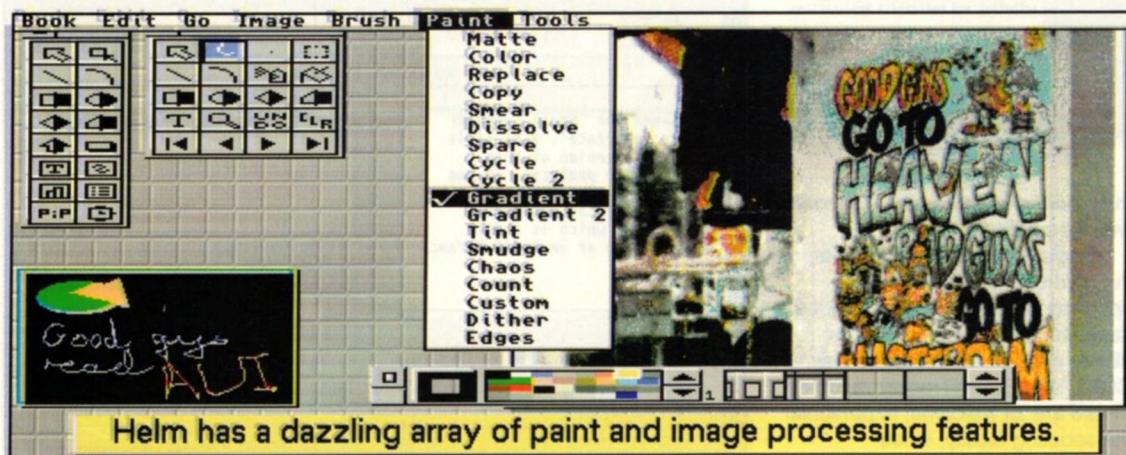
A page of one of the sample books included with Helm.

common to each page such as a backdrop, title and navigation buttons are designed on the form. These objects then appear on each page, which means that the only objects that then have to be added

book that has a database in it. You would probably design the page layout with a title, navigation buttons to move from one record (page) to another, and text fields to enter the relevant data. You



# LM



Helm has a dazzling array of paint and image processing features.

Helm has a comprehensive range of paint and image processing tools that operate within designated image fields. On the right is as image field into which a bitmap has been loaded, remapped and converted into the resolution of the page. At the bottom left is a second image field with objects rather crudely painted with a few of Helm's paint tools. The menu selector list the paint modes available.

obviously want to be able to enter different information into the text fields for each page, but the title and the actions of the navigation buttons must remain the same.

To achieve this you design a form with all the necessary objects that must be present on each page and mark those whose contents and attributes must remain constant from page to page as "Shared". Fig 3 shows an example of such a database.

## designing

One of the annoying features of authoring systems is the way you are forced to use a variety of different screens and menus in the course of designing a single application. It can get very confusing and, particularly when creating large projects, slows down the design process.

With Helm, all the design is done on one screen using an array of different tools ranging from an object creation to image processing, although you will still end up using an array of requesters.

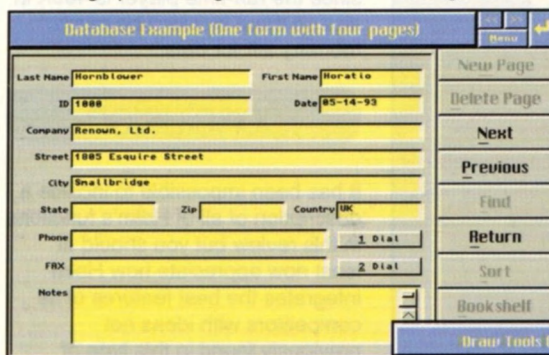
You start by adding objects with the Draw Tool (Fig 4). These can be given a wide variety of attributes and can be used in conjunction with the pattern and colour tools to create almost any object you could want.

A grid, which can be made

visible or invisible, is available into which objects can be snapped.

## image

Helm has some very powerful paint and image processing tools indeed.



An example of a database designed in Helm. The title, navigation and control buttons are "shared" form objects, i.e. their contents and attributes are identical on each page. Objects which are not shared can have different contents and attributes on each page. In this example the text fields that comprise the record data for Captain Hornblower (remember him?) must not be shared.

The facilities available are very similar to those found in paint programs such as Deluxe Paint, but unlike DPaint the tools don't operate on the whole screen but rather within the imagefields that you construct with the Draw Tool. You can therefore have as many imagefields on a page as memory permits, and operate on each one independently.

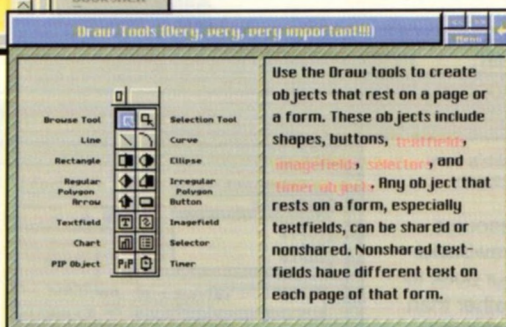
The range of image processing facilities is similarly extensive. Normally in the course of designing your application you would be swapping constantly between Art Department Professional and your authoring system to resize images, alter palettes and display types, and use various image operators, but with Helm the most important facilities are available to you directly. These include grabbing and importing other Amiga screens, a wide range of

colour processing facilities, convolution operators, all manner of paint modes and more (Fig 5).

## transitions

A range of visual effects similar to

those in Scala can be assigned to either the whole screen or just part of the screen. Different transitions can



The Draw Tool. Objects may be one of eight distinct types; a structured graphic drawn using Helm's own tools, textfields (titles, text or hypertext), charts (at last!), selector requesters, buttons, imagefields (for images or animations), timers and for those who have GVP's IV-24 multipurpose board, a Picture-in-Picture window.

be given upon entering or leaving a page or form and when moving from page to page or from form to form.

## levels

One of five user levels can be defined: Navigate, Type, Art, Create or Script. This is very handy when you need to restrict a user to certain options.

For example, you may wish the user only to be able to browse through your application, so you would set the user level to Navigate. Alternatively if you were creating a custom paint or image processing tool, you would need to set it to Art, so that Helm's Paint Window is available too. The Script setting gives the user complete control.

## menus

Once you have designed the layout of the forms and pages of your book, menus can be included too. They can be added to books, forms, or pages and can be context sensitive so that they will vary according to the user level.

## actions

There are 23 built-in actions that you can attach to page objects, menus, individual selector items, hypertext blocks, books, forms and pages.

Assigning an action or a series of actions is done simply by selecting the object, invoking the Action Requester, then dragging and dropping the required actions from the Action Catalog into the action list (Fig 6).

The actions available are fairly comprehensive and include going to a page, showing a picture or animation, playing sound samples, rendering an object visible or invisible, dialling telephone touch tones, sending messages to

specific ARExx ports, playing music (notes defined in classical notation, SMUS or MIDI files, or even CD audio if using a CDTV or A570). You can even control a genlock or display a test pattern complete with 1Khz tone for video calibration purposes.

## scripts

Complex applications will require actions other than those directly available from the Action Catalog, so you will need to use Helm's



## HELM

continued

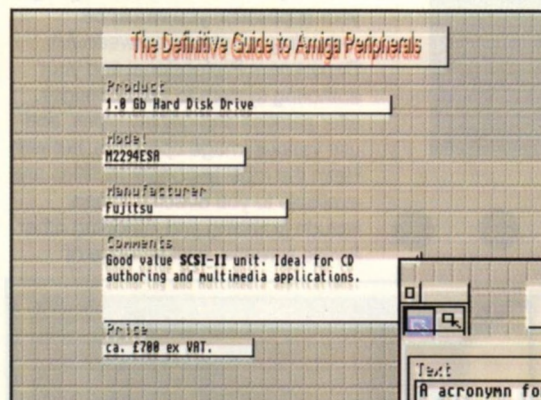
scripting facility to define them.

The scripting language is a general purpose programming language, rather like modern forms of BASIC. The commands available are extensive, giving complete control over all of Helm's functions together with variables and multimedia buffers.

In order to simplify programming as much as possible, Helm uses containers as places in memory where information is stored. This information may be variables which are typeless and can support multidimensional arrays, multimedia data such as pictures, sound, music or animations (buffers), or the contents of page objects.

Scripts are object orientated; they are assigned to objects and act upon certain user events, e.g. clicking hypertext with the left mouse button.

Once you have constructed your book, you can distribute it with the run-time player. One of Helm's rather neat features is its ability to integrate all external multimedia information such as images and



Clicking on the word SCSI in bold brings up -m

this, there should be a new version with these fixed.

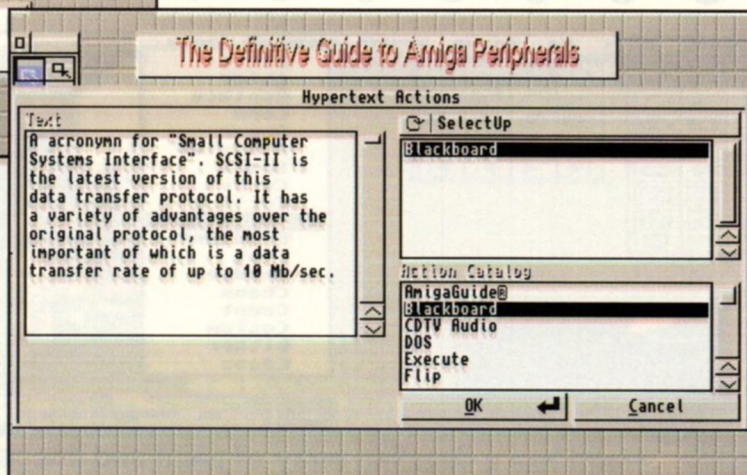
Eagle Tree informed me that the next update should include spooling for animations and sound samples, as well as support for dBase and SBase database files, CDXL, and SoundTracker modules. These are all welcome, in particular the spooling facility, since multimedia applications invariably involve large files.

I very much hope that direct control of external devices such as video recorders will be added in a manner similar to that for the IV-24's PIP feature. For example, currently you can control any RS232-controllable hardware device such as a laser disk player

by sending the appropriate ASCII commands as a Serial Action, but most users will have neither the time nor the inclination to do this, whereas a

Getting to grips with it will take the newcomer a while, but it is well worth it. Helm isn't as easy to use as Scala MM, but then for interactive applications, it's far more versatile and, of course, the run-time player does not require a dongle.

The other program with which it begs comparison is CanDo. It is



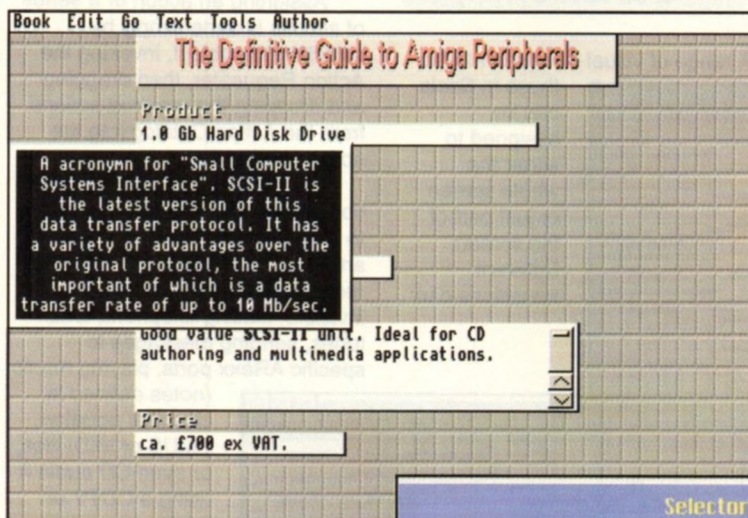
a "blackboard" action, giving the user more information about SCSI

controller similar to the EXes used by Scala MM would be far more preferable.

Support for creating books specifically for CD32 would be handy, since if you are authoring multimedia applications this platform is an excellent low-cost delivery system. You could use Helm now if your book was mouse driven, but with severe restrictions since the run-time player is 400K in size so there wouldn't be much memory left for data.

certainly easier to use than CanDo, but then again CanDo is not solely a multimedia authoring system and certainly has its own special virtues.

On balance, if you wish to author interactive multimedia applications, Helm, at around £90, represents incredible value for money and merits a "Best Buy" award. I very much look forward to future versions. **a**



A brief explanation of Helm's very versatile selector object tool.

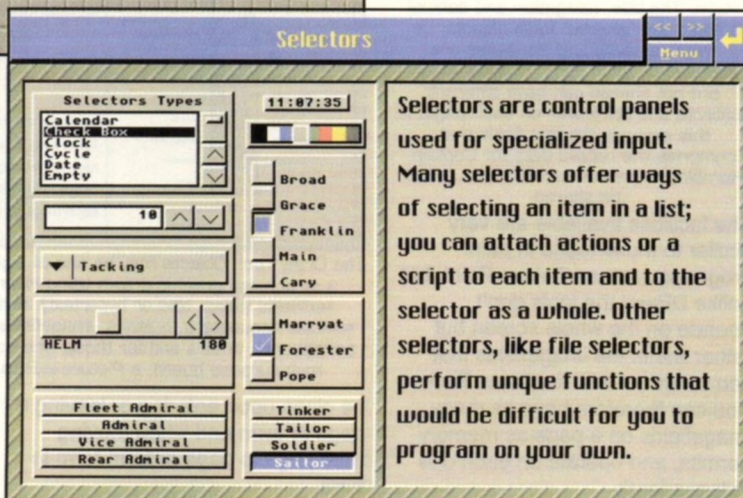
sound into the book as resource files. There are certain drawbacks to this, but if you want your book to be a self contained unit rather than dependent on external files it is a handy way of doing it.

## bugs

There are certainly some bugs in my review version (v1.35), but the ones I have found so far have been fairly minor. By the time you read

## conclusion

It has been impossible to include a description of all of Helm's functions in this review but you should at least now appreciate how Helm integrates the best features of its competitors with ideas not previously found in this type of program.



Selectors are control panels used for specialized input. Many selectors offer ways of selecting an item in a list; you can attach actions or a script to each item and to the selector as a whole. Other selectors, like file selectors, perform unique functions that would be difficult for you to program on your own.

## INFO

Price: about £90

Meridian

East House

East Road Trading Estate

London

SW19 1AH

Tel: 081 543 3500

## Ratings: Out of 10

FEATURES

0 2 4 6 8 10

EASE OF USE

PERFORMANCE

DOCUMENTATION

VALUE FOR MONEY

## OVERALL RATING

0 25% 50% 75% 100  
94%





Designed to bring you high performance at affordable prices AmiTek peripherals offer outstanding value-for-money. They are also designed and built to ensure easy fitting, and trouble free operation - making them a pleasure to use. AmiTek products are also thoroughly tested and are very reliable. So reliable that they are pleased to offer a full two year warranty on the full AmiTek range.

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# AMIGA

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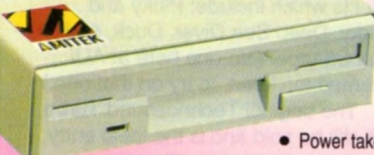
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The AmiTek drive has many advantages, see for yourself!	ANTI-CLICK	ANTI-VIRUS	STRONG METAL CASE	QUALITY SONY MECHANISM	ISOLATION SWITCH	2 YEAR WARRANTY
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ZAPPO	✓	✓	✓	✓	✓	✓
CUMANA	✓	✓	✓	✓	✓	✓

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1Mb

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## RAM UPGRADES FOR AMIGA 500/600

The following RAM upgrades are all trapdoor cards and do not affect your Amiga's warranty.

2 YEAR WARRANTY

**A500** - Low cost 512K upgrades, with or without a battery backed clock.

512K - NO CLOCK	512K - WITH CLOCK
<b>£18</b> INC VAT - RAM 0505	<b>£23</b> INC VAT - RAM 0510

**A500PLUS** - The A500PLUS has a battery backed clock built-in so these 1Mb RAM upgrades do not need this feature.

1Mb UPGRADE
<b>£30</b> INC VAT - RAM 0505

**A600** - 1Mb RAM increase with battery backed clock.

1Mb - WITH CLOCK
<b>£40</b> INC VAT - RAM 0610



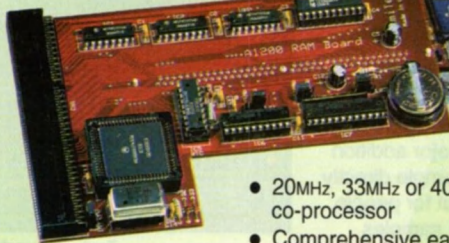
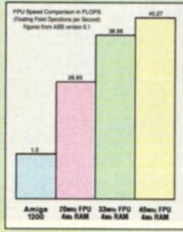
## HAWK

## RAM UPGRADE & MATHS ACCELERATOR

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# Technosound Turbo II

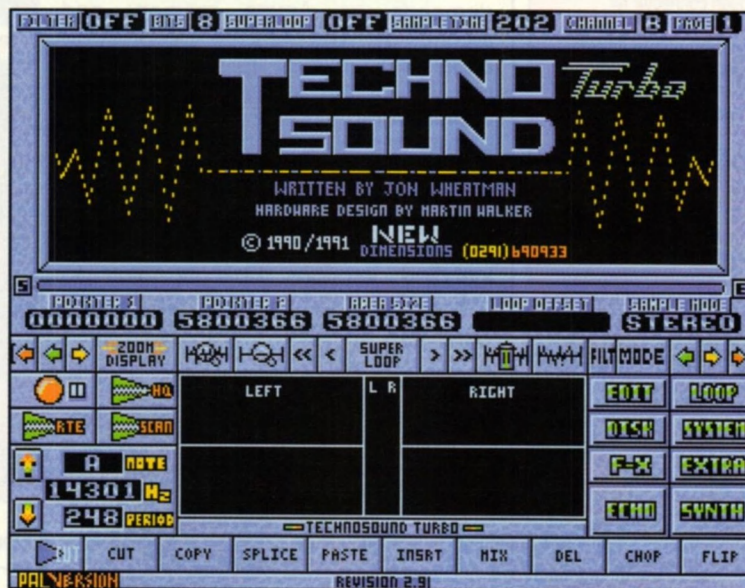
**W**hen we reviewed the original Technosound the software and hardware were of a high standard. The revision that has now been made is to the software. The hardware still looks very smart in its compact white case and manages the new software well.

The software has been completely redesigned. I found the original program somewhat awkward to use. It had a very small file requestor and every icon was extremely fiddly.

One major change that this new version features is pull down windows. These make life a whole lot easier and loading samples, which before was a hair pulling escapade, are now a doddle.

Pull down menus are only a surface scratch, there are heaps more useful features lurking within the program. Another major addition is the helpful ability to sample directly to hard disk. This is great for people who want to make huge samples and don't have the memory.

The sampling quality using this feature is affected by several factors. If you have a slow processor, the data may well not be processed speedily enough. Also if you have a slow hard drive the data will not be written sufficiently fast. However, the



Technosound's new cleaner looking front end.

Amiga. These are arranged in patterns to form musical compositions and you can play your tune by using the computer keyboard. A few PD Tracker programs allow you to sample your instruments and use them to make

time when everybody bought Atari ST's for music because they had this wonderful Midi interface built in. What people didn't realise was that an Amiga midi interface was very cheap to buy, being about £15-£20. Certainly now you don't need an ST to make wonderful music.

Technosound II allows you to play samples on the Amiga's four channels from an external midi keyboard.

The largest part of the time that I spent using the original Technosound was with the real-time effects. These are now controllable and can be saved as presets.

## effects

There are a number of other new effects which are very interesting. Sweep - as the name suggests - sweeps the sample backwards and forwards between the two speakers. Different sweeping effects can be achieved by adjusting the length and speed parameters.

The pitch of your sample can now now be increased or decreased, and is best used with speech. You can now make yourself sound either like Minnie Mouse, or Barry White, whichever is closer to your view of yourself.

As well as one real time menu in which you can alter the presets, there is a second called the Funtime Menu. This contains 18 novelty effects which include: Pinky and Perky, Deep Sea Diver, Duck, and Sex Change! (No-one here at AUI seemed too keen to try on that one.)

The original Technosound Turbo will still be sold and is the ideal entry level sampler as it is still very popular. TT2 is described as the "Bigger Brother" version.

TT2 can be bought in three ways. The complete package, including a nicely printed, well-written 40 page manual, connection leads, as well as the hard and software, can be snapped up for £49.99. If you already have the original TT then you can get a software upgrade for just £15 plus £1 P&P. You can also buy the software on its own for £29.99

## conclusion

Everything in this new version is improved. From the speed of sample processing to the user friendliness of the program itself. If you don't have a copy of this package, now is the time to buy. If you have, then an upgrade is well worth it. **a**

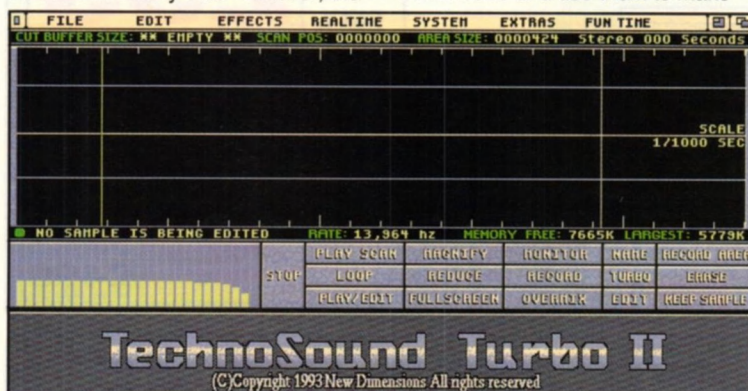
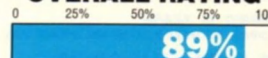
## INFO

Price £49.99  
New Dimensions  
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Raglan, Gwent, NP5 2AA  
Tel: 0291 690933

## Ratings: Out of 10

	0	2	4	6	8	10
FEATURES						
EASE OF USE						
SPEED						
PERFORMANCE						
DOCUMENTATION						
VALUE FOR MONEY						

## OVERALL RATING



The original Technosound was rather awkward to use.

sampling certainly worked fine on my A3000.

## tracker

Another new function is the Tracker program. This works in much the same way as many PD Tracker programs such as MED and Soundtracker. It enables samples of individual instruments to be played using the four audio channels of the

music but this commercial program makes it a lot easier.

The built-in sequencer makes it very easy to link very long samples together without displaying the waveforms on screen. This feature is ideal for making those unlimited techno remixes. The samples can be played from RAM, or if you have a fast enough one, your hard drive.

If you find the Tracker program a bit awkward, through using the keyboard to play the notes, then the Midi Module is for you. There was a





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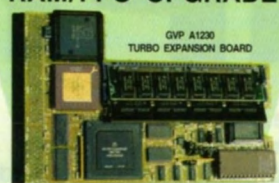
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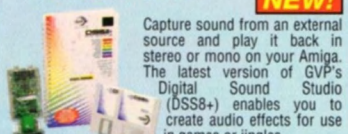
HC8+ HARD DRIVE CARD	0mb HD	42Mb HD	80Mb HD	120Mb HD
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Processor	68030EC	68040
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Std 32-bit RAM	4Mb	4Mb
Max 32-bit RAM	16Mb	64Mb
Extras	SCSI	SCSI Ser/Par
<b>PRICE</b>	<b>£699</b>	<b>£1299</b>
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# FractalPro 6

I can't help feeling a little uneasy about looking at a fractal program. I mean, isn't it a bit like putting on a mac and thick rimmed spectacles, collecting my SLR camera, my camcorder and tape recorder, not forgetting the note pad and informational books and standing on a BR platform in all weathers, spotting and recording every nuance of train-like information? Ticking them off on the 'great list of all train-like-things'...

Is it a bit anally retentive or is it not? Am I a complete cynic or not?

Fractals are essentially mathematical equations that can generate images (this is over-simple but then again, so am I). There are many different kinds of Fractals such as Mandelbrot and Julia, the most well known. Vista Professional uses fractal mathematics to create landscapes that look nearly real and that you can move around in. It doesn't matter where you go or how close you get, they will still contain the same amount of apparent detail. Fractals in FractalPro are very similar but they are not trying to emulate anything in nature as Vista Pro is doing. FractalPro just makes pretty pictures. Oh yes and, of course, it's educational. If you're studying anything to do with fractal mathematics, that is.

FractalPro is by the same person as CellPro - see review in this **AUI** - but in this case it's a far more professional product. The menus, as you can see, are up-to-date and cover all of the latest AGA graphics resolutions. But they are not what I would call 'user-friendly'. In fact, the menus are so complicated to look at that I had to have a drink before I could continue. However, anyone who is really interested will no doubt spend the time to work them out.

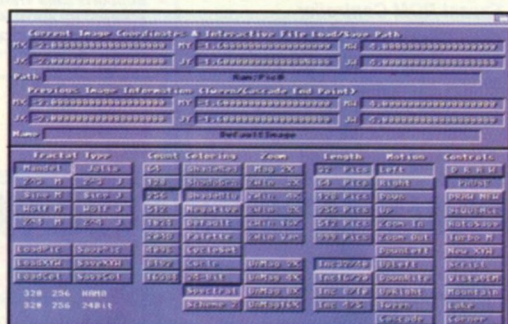
FractalPro is not really a program to use without the manual but I really feel it should be. Point and click and interactive control is what we need here. Not typing in so many numbers and having to make so many guesses as to the outcome of your actions. It's too

time. It's like tweening in an animation program and can produce some pretty psychedelic animations. Good for pop videos or raves. They could also be used as animated maps in a 3D program like Imagine or Real 3D.

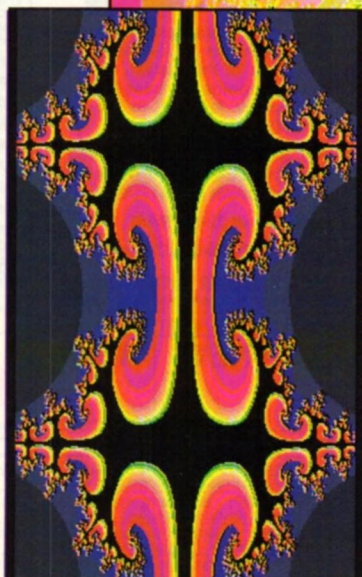
2. You can save fractal images as Vista Pro DEM files. These can then be loaded into

Vista Pro for rendering and animating. Interesting.

3. You can sit and paint rainbow coloured patterns of an ever changing, ever constant form without spending a penny on artist's materials - a fascinating and agreeably aesthetic experience, especially if you are into minimalist art.



The Fractal Pro interface is reasonably well presented.



Erm, it's another fractal.

off-putting. Still complex and sometimes very beautiful pictures are produced.

However, there are a few interesting uses to which FractalPro can be put.

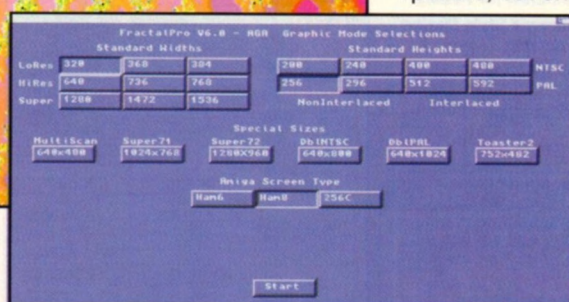
1. You can set up a sequence of fractal views with options for zooming in and out or panning across and also for changing the parameters over

It's definitely a fractal.

**It doesn't matter where you go or how close you get, they will still contain the same amount of apparent detail.**

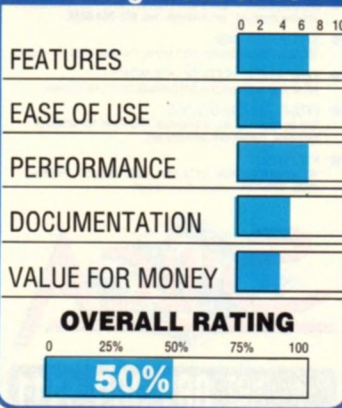
a minority of the population, one less numerous than train spotters, but on the whole one that is more creative.

The sheer complexity of fractals, yet their ease of creation with programs like FractalPro is in itself doubtless an attraction to some. Not my



Fractal Pro allows a variety of resolutions to be used.

## Ratings: Out of 10



personal cup of Euclidean or Einsteinian tea, I prefer something a bit more animated. But maybe I am, as I said before, a bit over-simple. **a**

## Info

Price: US \$199.95 (about £130)  
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Tel: 0101 805 349 1104



# RICOH LP1200 PCL5 LASER PRINTER

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2Mb RAM

SHOWN WITH UNIVERSAL FEEDER TOP TRAY (OPTIONAL EXTRA)

The 4Mb RAM version can print a full A4 page of graphics at 400 dpi and makes full use of the LP1200's 400 dpi printing capabilities, such as using Microsoft Windows fonts. Unique additional standard features include FLASH ROM 'future proof' technology and LAYOUT - a powerful document description language. The LP1200's unique internal FLASH ROM, which holds the printer controller firmware, can easily be updated as new developments in technology occur. This protects the investment you make in buying a Ricoh LP1200. Other manufacturers would require you to buy a new printer! Internal FLASH ROM and industry standard FLASH ROM PCMCIA cards can also be used to permanently store fonts, macros, graphics and extra emulations. Again, unlike the competition, the LP1200 includes LAYOUT, a powerful and intuitive document description language as standard. This offers unique opportunities to develop custom made printing systems. Forms and document templates can be designed complete with logos and stored electronically in the LP1200's FLASH ROM, alleviating the need for pre-printed forms!

The LP1200 comes with a 100 sheet A4 paper tray as standard. An optional universal feeder automatically feeds up to 150 sheets of paper (up to 169gsm), 15 envelopes, transparencies and labels.

### CONSUMABLES + ACCESSORIES

PRODUCT CODE	PRODUCT DESCRIPTION	PRICE EXC. VAT
CAB 7500	Cable for PC/ST/Amiga	£8.47
KIT 5200	Laser Starter Kit inc Cable	£12.50
LAA 5238	Universal Feeder (2nd Tray)	£85.00
LAA 5262	2Mb RAM Module	£85.00
LAA 5210	Developer/Toner Cartridge	£65.00
LAA 5225	OPC Cartridge (Drum)	£89.00
LAA 5312	A4 Paper Tray (100 Sheets)	£35.00
FAX 1200	Ricoh Fax/Modem Software/Firmware	£120.00
MOD 7199	Pace Microlin FX Fax/Data Modem	£180.00
LAA 5279	Ricoh Flash ROM Card (0.5Mb)	£49.00
LAA 5288	Ricoh Flash RAM Card (1Mb)	£199.00
LAA 5290	Ricoh Flash RAM Card (4Mb)	£599.00

All Prices are Exc VAT - CALL FOR A FULL PRICE LIST  
\*Note: A4 paper tray is already included in the printer price. More A4 trays can be purchased to feed different coloured stationery.



PC MAGAZINE  
EDITOR'S CHOICE  
OCTOBER '92

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The LP1200 is the World's First Laser Printer to have the option of being upgraded to a PC independent plain paper fax. Just download the software (£120.vat) into the LP1200's Flash ROM and connect any fax/modem to the Serial Port (we recommend the Pace Microlin FX - £180.vat). Using the Windows and DOS software supplied you can send and receive Laser quality faxes all over the world!

#### FAX/MODEM SOFTWARE FEATURES - £120.vat - FAX 1200

- Combine 2 or 4 faxes onto one page (A4)
- Grayscale, 3 types of images
- Photographic, Line Art, Ricoh Scanned
- Phone number directory (using Windows driver)
- Broadcast (using Windows driver)
- Windows and DOS version
- Receive faxes when PC is switched off
- Use printer for printing while receiving faxes in background mode
- Use LaserJet or Layout protocol documents
- Send faxes from any Windows application

#### MODEM/HARDWARE FEATURES - £180.vat - MOD 7199

- CCITT Group 3 send/receive
- Laser quality output
- Automatic retry on busy (x3)
- Memory useable - 2Mb (upgradeable to 4Mb)
- Document macros
- PCMCIA/Intel flash card firmware module available
- A4 paper - but can receive A3 pages scaled down to A4 - 300 dpi. Can send A4 pages scaled up to A3 - 300 dpi
- Out of paper receive
- 9600 baud Fax modem
- 2400 baud Data modem
- Hayes compatible - UK manufacture
- 5 year warranty on modem
- Includes: fax/modem, software, mains adaptor, serial cables, PSTN connection lead and manuals

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With scalable fonts and vector graphics
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For controller upgrade and storage
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For programmable FLASH ROM cards
- EXPANSION BOARD SLOT  
For improved connectivity eg. Coax/Twinax, PC-LAN etc
- LAYOUT Document Description Language
- SERIAL + PARALLEL PORTS
- 1 YEAR ON-SITE WARRANTY  
Next working day response

FREE DELIVERY

LP1200 WITH SINGLE BIN & 2Mb RAM LAA 5200

## £599

+ VAT = £703.83

RAM UPGRADE - 2Mb to 4Mb (LAA 5262) £85 + VAT  
UNIVERSAL FEEDER (LAA 5238) £85 + VAT  
FAX OPTION Requires a modem (FAX 1200) £120 + VAT  
MODEM Pace Microlin FX for Fax Option (MOD 7199) £180 + VAT

FEATURES	IBM 4029-020	FUJITSU VM600	CANON LBP-4 PLUS	STAR 8111	RICOH LP1200
Average Street Price (excl. VAT)	£929	£699	£659	£899	£699
Maximum resolution in dots per inch	300 x 300	300 x 300	300 x 300	300 x 300	400 x 400
Windows 3 Driver @ 400 dpi	-	-	-	-	YES
Print Speed	6ppm	6ppm	4ppm	6ppm	6ppm
Straight Paper Path	-	NO	(ONLY FACE UP)	YES	YES
PCL 5 Printer Command Language	-	YES	-	YES	YES
HP-GL/2 Vector Graphics included	YES	YES	-	YES	YES
Resolution Improvement/Enhancement	YES	YES	YES	YES	YES
Standard RAM	1Mb	1Mb	512K	1Mb	2Mb
Full A4/300 dpi graphics with standard RAM	-	-	-	-	YES
Warm Up Time	33 secs	25 secs	<60 secs	60 secs	45 secs
First Page of Text Output	-	15 secs	31 secs	18 secs	<15 secs
Document Description Language included	-	-	-	-	YES
Flash ROM	-	-	-	-	YES
Flash ROM Upgradeable Firmware	-	-	-	-	YES
PCMCIA Card Slot	-	-	-	-	YES
Scalable Resident Fonts - in HP LJ III Emulation	0	8	0	8	8
Resident Bit-Mapped Fonts	10	14	2	14	14
AGFA Intelligent Scalable Font Technology	-	YES	-	YES	YES
HP LaserJet III Emulation Included	-	YES	-	YES	YES
EPSON FX Emulation Included	-	YES	YES	YES	YES
IBM ProPrinter Emulation Included	-	YES	YES	YES	YES
Standard Tray Capacity	200	150	70	200	100
Protective cover on standard tray	YES	-	YES	YES	YES
Cost per copy**	1.9p	2.0p	2.1p	2.2p	1.65p
Min-Max Paper Weight in gsm	60-163	60-157	60-105	60-135	60-169
Ability to print on OHP Film	YES	YES	YES	YES	YES
Ability to print on 169gsm card (Manual Feed)	-	-	-	-	YES
Standby - Noise Level	38dB(A)	35dB(A)	<43dB(A)	<43dB(A)	<38dB
Printing - Noise Level	50dB(A)	46dB(A)	<53dB(A)	<53dB(A)	<48dB
PC Independent PLAIN PAPER FAX OPTION	-	-	-	-	YES

\*\*As quoted by manufacturers - July '93

£&OE All trademarks are acknowledged



### SILICA OFFER YOU

- Before you decide when to buy your new laser printer, we suggest you think very carefully about WHERE you buy it. Consider what it will be like a few months after you have made your purchase, when you may require additional peripherals or consumables, or help and advice. And, will the company you buy from contact you with details of new products? At Silica, we ensure that you will have nothing to worry about. With our unrivalled experience and expertise, we can meet customers' requirements with an understanding which is second to none. Complete and return the coupon now for our latest FREE literature and begin to experience the 'Silica Service'.
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To: Silica Systems, AMUSR-1293-75, 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX

### PLEASE SEND INFORMATION ON RICOH LP1200

Mr/Mrs/Miss/Ms: ..... Initials: ..... Surname: .....

Company Name (if applicable): .....

Address: .....

Postcode: .....

Tel (Home): ..... Tel (Work): .....

Which computer(s), if any, do you own? ..... 75W

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test drive

# CellPro

**A**ny thing to do with animation?  
No.  
Well, what is it then?  
As it says in the manual, "CellPro's purpose is to let you explore the world of Cellular Automata."

Oh yes, of course, silly me!

OK, well, I think we better start with an explanation of Cellular

an intellectual attraction for some people. However, I can't think that too many people, while CellPro generates away, will want just to sit mindlessly in front of the screen. But you never know - look at the millions who play platform games... Maybe CellPro *is*, like life, what you make it. **a**

## Barry McCarthy test

drives a modest graphics  
program that is, he says,  
like life - you only have  
one go at it.

you can get it through, before it either settles down to a stable equilibrium or dies completely.

CellPro is designed as a more 'professional' version of the program of Life. In other words, it uses more colours and has a lot more options.

well, that's life I suppose. You're born, you live (and wiggle about) and then you die. Like games or even Amiga product reviewers...

That really is it, unless you believe in some kind of religion that gives you an alternative to enable you to stop worrying about the stupidity of it all. The opium of the people, someone once said. Personally I prefer the pub.

Hang on, have I strayed from the point here? (Yes, you have. **ED**)

## modes

The program itself works in NTSC and 16 colours. There is, it seems too me, a distinctly old look about it. Like the old days of the Amiga. It's all very nostalgic but not very pro really.

You can, however, draw your own seeds for the life process and load them into CellPro. All you do then is take it off pause and watch the results. This involves the screen wiggling and colour cycling as the 'generations' are generated before your very eyes. Oh what fun.

I'm just going to post a letter, back in a few minutes...

...oh, it's dead! Oh

Automata (plural; the singular is Automaton). They are imaginary, abstract universes of cells. Each pixel on the screen represents a single cell and its value is represented by its colour. All clear so far? If anyone has played a PD game/demo called LIFE, then you'll know what this is all about. At it's simplest level, put a few cells together in a pattern and give them a few simple behavioral rules; for each cell, if it has two adjoining cells, it's happy; if it has one or less then it dies of loneliness; if it has more than two then it will die of overcrowding. The cell is either on/active (white) or off/inactive (black). That's it.

Just make up a simple pattern and see how many generations

## conclusion

CellPro is very interesting the first time you try it out, but would you ever use it a second time? I know I won't. Maybe if it worked in native Amiga modes (including PAL), had a more modern interface and standard requesters, worked in some sort of 3D and gave the user interruptible

interaction, then it might start looking less like an old PD program.

It will probably have

## Info

Price: US \$79.95 (about £50)

Contact: Megagem,  
1903 Adria Street, Santa Maria,  
California, 93454-1011  
Tel: 0101 805 349 1104

## Ratings: Out of 10

FEATURES

0 2 4 6 8 10

EASE OF USE

PERFORMANCE

DOCUMENTATION

VALUE FOR MONEY

## OVERALL RATING

0 25% 50% 75% 100  
**27%**



# SEIKOSHA PRINTERS NEW! COLOUR

Silica are pleased to recommend the high quality range of Seikosha printers, built by a company that is used to manufacturing quality precision products. Seikosha are part of the massive Seiko/Epson group with a turnover of £6 billion and 18,000 staff! Every dot matrix printer from Silica comes with a free printer starter kit which includes all you need to get up and running with your new Seikosha printer (see below).

## 24-PIN £169

EXC VAT

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- DELIVERY** Next day - anywhere in the UK mainland.
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- AMIGA DRIVER** Seikosha Plus Printer Driver with every SL-96. For extra high quality output. Features include:
  - Definable Dither Routines
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  - Ink Compensation Correction
  - Workbench 2/3 GUI
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- STARTER KIT** With every Seikosha dot matrix printer



Every Seikosha dot matrix printer from Silica comes with a FREE Starter Kit, worth £29.38 (£25+vat).

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ON-SITE WARRANTY 1 YR - ONLY £10.00 - POS B515

- Seikosha SP-1900 Plus
- 9-Pin Dot Matrix
- 80 Column
- 192cps Draft, 48cps NLQ
- 1K Printer Buffer + 2 Fonts
- Parallel Interface
- Graphics Resolution: 144 x 72dpi
- Epson and IBM Emulation (Windows compatible using Epson/HP drivers included as standard in Windows 3.1.)
- Automatic Sheet Feeder Option
- Auto Paper Load, Paper Parking
- FREE Silica Printer Starter Kit

PRINTER RRP £149  
STARTER KIT £25  
TOTAL VALUE: £174  
SAVING: £65  
SILICA PRICE: £109  
**£109**  
+ VAT = £128.08 PRI B195

### 9-PIN 80 COLUMN 300CPS



ON-SITE WARRANTY 1 YR - ONLY £10.00 - POS B515

- Seikosha SP-2400
- 9-Pin Dot Matrix
- 80 Column
- 300cps SD, 240cps D, 60cps NLQ
- 21K Printer Buffer + 5 Fonts
- Parallel and Serial Interfaces
- Graphics Resolution: 240 x 144dpi
- Epson and IBM Emulation (Windows compatible using Epson/HP drivers included as standard in Windows 3.1.)
- Optional Auto Sheet Feeder Unit
- FREE Silica Printer Starter Kit (Wide Carriage Model Available SP-2415 - £219 + VAT = £257.33 PRI B215)

PRINTER RRP £185  
STARTER KIT £25  
TOTAL VALUE: £210  
SAVING: £71  
SILICA PRICE: £139  
**£139**  
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### 24-PIN 80 COLUMN 240CPS



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- Seikosha SL-90 Plus
- 24-Pin Dot Matrix
- 80 Column
- 240cps SD, 192cps D, 84cps LQ
- 20K Buffer + 9 Fonts
- Parallel Interface
- Graphics Resolution: 360 x 360dpi
- Epson LQ850 Emulation
- Windows Driver as Standard
- Semi-Automatic Sheet Feeder, Paper Parking, Optional Automatic CSF
- FREE Silica Printer Starter Kit

PRINTER RRP £189  
STARTER KIT £25  
TOTAL VALUE: £214  
SAVING: £75  
SILICA PRICE: £139  
**£139**  
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ON-SITE WARRANTY 1 YR - ONLY £10.00 - POS B515

- Seikosha SL-96
- 24 pin - Dot Matrix
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- 42K Printer Buffer
- 2 Scalable Fonts + 8 Bitmap Fonts
- Parallel Interface
- Graphics Resolution: 360 x 360 dpi
- Epson LQ870 Emulation with Colour Function
- Colour Windows Driver as Standard
- Colour Printing as Standard (Includes Colour Ribbon - Black Ribbon Optional Extra)
- Friction Feed/ Push Tractor
- Optional Automatic Cut Sheet Feeder
- FREE Silica Printer Starter Kit

PRINTER RRP £249  
STARTER KIT £25  
TOTAL VALUE: £274  
SAVING: £105  
SILICA PRICE: £169  
**£169**  
+ VAT = £198.58 PRI B311

### 180cps INKJET



ON-SITE WARRANTY 1 YR - ONLY £10.00 - POS B515

- SpeedJET 200 - Inkjet Printer
- 50 Nozzle Inkjet Head
- 180 CPS Draft, 120 CPS LQ (10cpi)
- Print Through 2.67 Pages Per Minute
- 128K Printer Buffer - 3 Built-In Fonts
- 1 x IC Card Slot for Buffer Expansion/Fonts
- Parallel Interface - Graphic Resolution 300 x 300dpi
- HP Deskjet Plus Emulation (PCL3+)
- Windows Driver Standard
- Semi Automatic Single Sheet Feeder
- Optional Automatic Sheet Feeder - 70 Sheets (£35 + vat)
- Ultra-Quiet - Less Than 45 dB/A

PRINTER RRP £235  
TOTAL VALUE: £235  
SAVING: £56  
SILICA PRICE: £179  
**£179**  
+ VAT = £210.33 PRI B022

### 300cps INKJET



ON-SITE WARRANTY 1 YR - ONLY £24.63 - vat - POS B002

- SpeedJET 300 - Inkjet Printer
- High Capacity 128 Nozzle Head
- 24K Printer Buffer - 3 Built-In Fonts
- Large Ink Tank - up to 4.2 Million Characters
- 300 CPS Draft (10cpi) - 300 CPS LQ (10cpi)
- 80% Faster Than Most of the Competition
- 2 IC Card Slots for Buffer Expansion + Fonts
- Parallel Interface - Graphics Res. 300 x 300dpi
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- Built-in Automatic Sheet Feeder - 100 Sheets
- Economical to Run - only 1.3p per page
- Ultra Quiet - 46dB(A) Maximum

PRINTER RRP £359  
TOTAL VALUE: £359  
SAVING: £110  
SILICA PRICE: £249  
**£249**  
+ VAT = £292.58 PRI B030

### 4PPM LASER



ON-SITE WARRANTY 1 YR - ONLY £10.00 - POS B515

- OP-104 - 4 Pages per minute
- HP LaserJet IIPm Emulation (Windows compatible using Epson/HP drivers inc. as standard in Windows 3.1.)
- Resolution: 300x300dpi - 14 Fonts
- Uses Original HP® Font Cards
- Postscript Emulation Option (Extra)
- Optional IBM, Epson & Diablo Emulation Cartridges
- Centronics Parallel & RS232C/RS422 Serial Interfaces
- 512K RAM - expandable to 2.5Mb
- Flexible paper handling: Standard paper cassette - 100 sheets, Optional 2nd bin - 300 sheets
- Cable required: CAB 7500 for PC - £9.95 or CAB 7614 for ST/Amiga - £12.95

PRINTER RRP £899  
TOTAL VALUE: £899  
SAVING: £480  
SILICA PRICE: £419  
**£419**  
+ VAT = £492.33 LAS B004



### THE SILICA SERVICE

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Which computer(s), if any, do you own? ..... 84P

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## **Gideon Overhead joins** **the jetset with a new** **entry-level offering** **from Seikosha.**

**T**his very compact printer is ideal for someone who works in a small office or has limited space at home. It has, however, some extremely frustrating features. The first and foremost irritation is the automatic sheet feeder (ASF). The fact is, there isn't one. If you need one, you have to buy it separately. As most people need an ASF on their printer, leaving it off just seems like a silly thing for Seikosha to have done.

It means that you have to insert each sheet manually which is especially inconvenient when printing long documents. Many other printers make life easier by feeding the paper in automatically as soon as it touches the sensor. Not the Seikosha. To load, you have to place the paper at the printer's loading bay with one hand and press the Form Feed button with the other. However, it must be said, the Seikosha hardly ever shreds your documents using its clumsy sheet feeding method. One point in its favour.

### quality

Once you have overcome the shock of how awkwardly the manual sheet feeder works, you now have the task of getting it to print. The good news is that it does print well and the quality is almost indistinguishable from that of superior inkjets like the Epson Stylus 800 (reviewed in this *au!*).

**I thought, how on earth**

**am I going to select the**

**different fonts and**

**functions using only**

**three buttons?**

The bad news is that is rather slow as ink jet printers go and also quite noisy. It seems to delight in making a racket while ejecting a page.

At first glance I thought, how on earth am I going to select the different fonts and functions using only three buttons? Of course, this

was before I had read the manual. (RTFM are my initials these days!)

I discovered a wonderful system of function selection. Unlike a lot of other manufacturers' models, this printer does not have a series of buttons and lights that you have to press about twenty or so times to select the correct function. Hidden under a flap there are thirty three small switches. From this you can select such functions as paper sizes, character sets and all the on board fonts.

This is a wonderful system and works like a dream. You can see straight away see what spec has been set. Some printers forget their programmed parameters when they are switched off as they are set internally. Seikosha's physical switching method, although in some ways a step

backward in the world of electronic selection, seems the best function selection system I've used so far.

### plastic

There is a curious sliding bit of plastic that is visible as you load a sheet of paper. This seems to rattle around when you move the printer from place to place. It turns out to be a way of clearing the print head nozzles. You will need to do this if you find that print the quality has deteriorated. This is another function that many other printers do automatically. You have to slip this bit of plastic, called an ink slide, backward and forward to clear any blockages that are present.

There are three resident fonts available to you. These are: Courier, Gothic and Times. There

are presently 15 font cards which you can buy. These fit snugly into the top of the machine and come in both 128K and 256K sizes. It has a 128k buffer, a 300 x 300 DPI resolution and will take envelopes - fed manually, of course.

**Seikosha's physical**

**switching method**

**seems the best function**

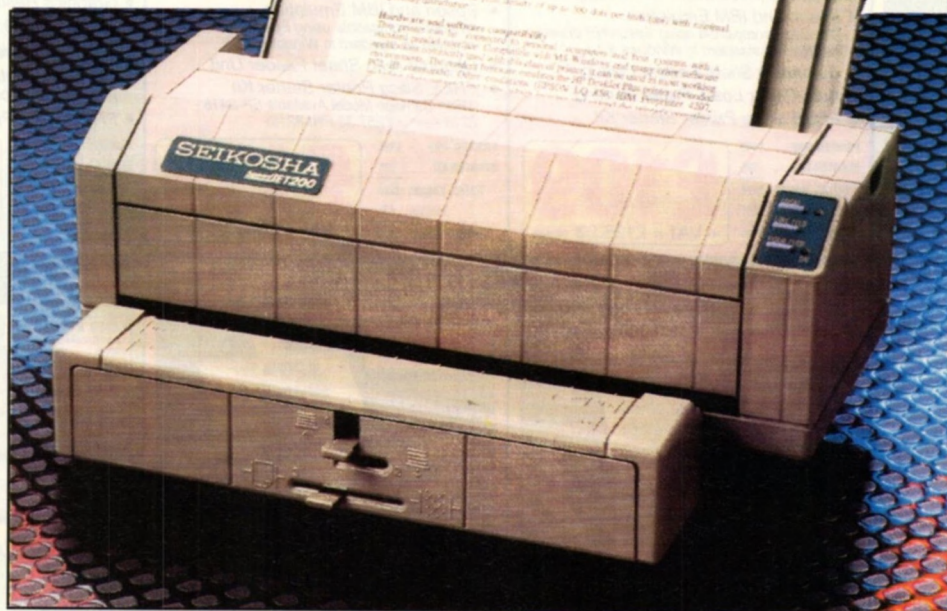
**selection system I've**

**used so far.**

Seikosha told us that due to some cleverly innovative design the "long-life" printhead which has 50 jets needs replacing after more than 2000 pages which means that it prints at a comparatively cheap price per page.

### conclusion

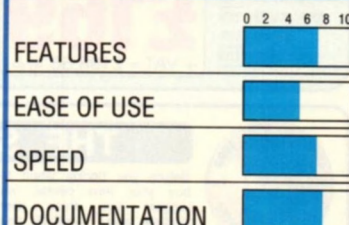
The Speed Jet 200 is just a bit of a disappointment. The paper feeding problem gives it a high rating on the hassle scale and it could do without the other more minor irritations. On the plus side, it is small, light - 2.9 kilos - easily portable and produces excellent bubble jet output that you will be proud of. Also, if you find programming printers your personal nightmare, the delightful simplicity of the Seikosha printer's function setting will make it a pleasurable doddle for you to use. **a**



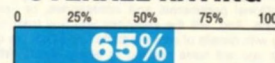
The SpeedJET 200 with the (optional) sheet feeder - low price but high on quality and hassle.

# SPEEDJET 200

## Ratings: Out of 10



## OVERALL RATING



## INFO

Speed Jet 200

Price: £235.00

Contact: Seikosha Ltd, Unit 14, Poyle 14,

Newlands Drive, Coln Brook FL3 0DX

Tel: 0753 685873



**Gideon Overhead**  
**finds a new level**  
**of style with new**  
**print technology**

**T**here was a time when all printers both looked the same and worked in the same way. The paper was fed in a similar way and if it decided it was time to shred your document then you could always rely on the trusty manual paper feeder found on the right hand side of the printer.

In the classic phrase, that was then and this is now.. Printers have changed shape more times than... well, that morph-mad hunk in Terminator 2, and it does seem that the manufacturers will now never decide a uniform design.

## Techno Info

Most inkjet printers employ one of two technologies: Thermal Jet, and Piezo. Thermal Jet technology is based on the rapid alternate heating and cooling of a small thermal element positioned next to the print head. This creates a gas bubble which forces the ink out of the opening as a droplet. This form of printing is used for inexpensive printers and offers reduced print quality, lower print speed, and shorter head life but it is a relatively cheap technology, especially in manufacture.

Piezo technology is rather more complicated. It uses the well understood principle frequently found in gas lighters. A piezo disk, which is made of crystal, distorts when a voltage is applied. this allows greater control over the ink droplet expelled from the print head.

This technology is more expensive to produce as it requires a large print head together with a high voltage to drive the piezo disk. These factors, up to now, have prevented the use of this technology in low cost compact printers. Epson have developed their own new technology called MACH (Multi layer ACTuator Head). This is based on Piezo technology but the head is much smaller and requires a lower voltage. The Stylus 800 is the first printer to incorporate this development. And the MACH way of printing surely makes a big difference.

# STYLUS 800



Excellent results from innovative technology.

Epson's Stylus 800 is yet another innovative creation but the look is not the only thing that's innovative about it. This printer is one of the first to incorporate a new way of printing - Mach technology.

The Stylus 800 races along while printing, attaining speeds almost that of dot matrix printers. The print quality is excellent with no fuzzyness. The ink comes in a small cartridge which contains about 21/24cc. This should last a considerable time but I must sound a word of warning. Once installed the ink cartridge must not be removed. I imprudently did this and it caused an air lock and confused the ink out sensor.

## handling

The Stylus 800 has an excellent if somewhat unusual paper handling mechanism. A wad of paper is fed into the sheet

feeder at the front of the printer, and when it is printed, fed back out the front. There is a manual feed slot at the back of the printer. As well as being used for single sheets, this is ideal for printing on envelopes.

There are seven different fonts that come with the printer. These are, Courier, Roman T, Sans serif H, Roman, Sans serif, Prestige, and Script. Both the two Roman and Sans serif fonts are scalable from 8 to 32 pt in 2 pt increments. Font selection is via three lights on a control panel.

## conclusion

This is an excellent printer giving good quality results and is well worth the asking price of £329, especially considering it so successfully employs the new MACH technology.

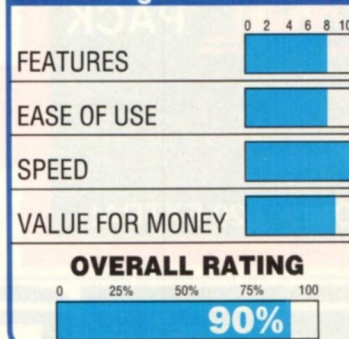
Faults? Hardly any. If I had to grumble, I would say that it isn't as small as I would like, and the font selection is not as good as the Seikoshia's but that's all the complaints.

Otherwise this is a highly recommendable printer. **a**

## INFO

PRICE £329.00 RRP  
 EPSON (U.K.)  
 Maylands Avenue  
 Hemel Hempstead  
 Herts, HP2 7EZ  
 Tel: 0442 61144

## Ratings: Out of 10





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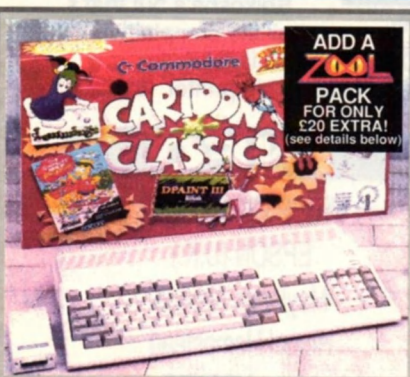
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# THE Studio STORY

**F**unny how things turn out, isn't it? Life just happens and you never give it a second thought, then one day you look back and realise that if one particular event a long time ago hadn't happened, everything might have been different...

About three and a half years ago I acquired a Canon BJ-130 bubble jet printer. The manual said it could print graphics at 360 dots per inch, but there was no Amiga printer driver for it so I had to use it in Epson 9-pin emulation. On my quest for a better Epson driver I bumped into a PD driver written by a German called Wolf Faust. His address was in the documentation, so I wrote him a begging letter. Could he write a BJ-130 printer driver for me? I would willingly pay for his time and expertise. He quickly wrote back and said that he didn't want any money,

I told David about Wolf and put them in touch with each other. At the time I didn't know why David was so interested. The BJ-130 was quite an expensive printer; Amiga users were much more likely to buy a Hewlett-Packard DeskJet, for which there was at least limited Amiga support.

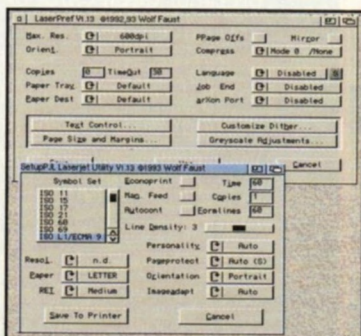
## portable

But you're way ahead of me because you know what happened. The portable BJ-10e happened. Wonderful 360 dpi graphics for £200. Canon (UK) Ltd paid Wolf to write the Amiga driver for that and commissioned others for the then soon-to-be-released 360 dpi BJC-800 colour bubble jet and the Canon LBP laser printer range.

Meanwhile, behind the scenes, Wolf was looking at the pictures in JAM and telling me I could do better if I bought a better scanner. I told him there wasn't any point because the Amiga can print only 16 shades of grey, so printouts from 24-bit scans were not going to be much better unless I could have control over dither patterns. The dots in a standard Amiga printout are too close together, you see, so darker shades of grey tend to merge into blackness. Then IrseeSoft released Turboprint Professional and I started to use that in preference to Wolf's driver. Talk about red rag to a bull!

Wolf quickly resolved to write something even better. The BJ drivers were enhanced and special preferences programs were developed so that you could control the brightness, contrast and gamma levels of the printouts from any Amiga software. But still no dither pattern control. It didn't occur to me that Wolf might know diddy-squat about dithering. I was brought up to believe that programmers knew everything. But Wolf didn't. So he bought a book (Digital Halftoning by Robert Ulichney, ISBN 0-262-21009-6) and overnight turned into a dither pattern bore. Within weeks I had dither patterns coming out of my ears and a 24-bit picture-printing program that he called CanonStudio. (Don't ask me. It probably sounded like a good name at the time.) I could hardly believe that, barely a year after first writing to Wolf, I had in my hands the most powerful Amiga printing software ever written.

**"The most powerful Amiga printing software ever written" Jeff Walker is surprised to discover that his destiny was to help make it happen.**

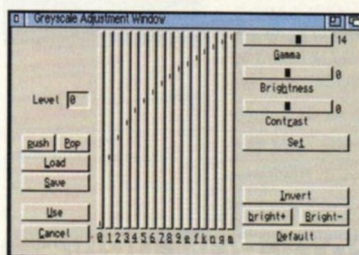


Full support is provided for LaserJets and compatibles, and there's even special software for controlling the LaserJet 4L.

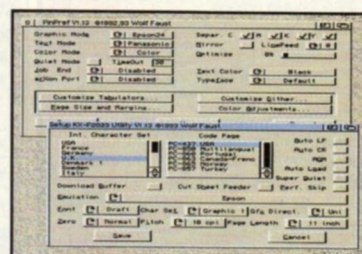
but if I sent him the manual he'd give it a crack. Ach, what the heck, the manual was no use to me anyway. In the post to Germany it went.

I heard nothing for a month or so. I'd honestly given up on it. Then out of the blue a disk arrived in the post with one file on it and a scrawled note that said "Does it work?" Yes, it did. It worked very well indeed. That same afternoon Wolf phoned me because he couldn't stand the suspense of not knowing. The chain of events that eventually led to the Studio Printer Software package had begun.

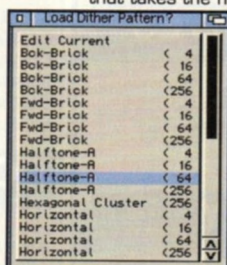
Now the reason I so desperately wanted this driver was because I intended to use the 360 dpi BJ-130 to produce the camera ready artwork for a little venture of mine called Just Amiga Monthly. The first four issues were printed in Epson 9-pin mode and boy did it show. Issue 5 was run off with the new driver and the difference was enormous. To sell and publicise JAM we exhibited at all the major Amiga shows. Tucked away in a corner at a 16 Bit Show (remember them?), a long-haired biker looking fellow approached one day and, pointing at JAM, said "How do you print that on a BJ-130, there's not an Amiga printer driver for it." David Williams was this chap's name and he was something in the technical support division of Canon (UK) Ltd.



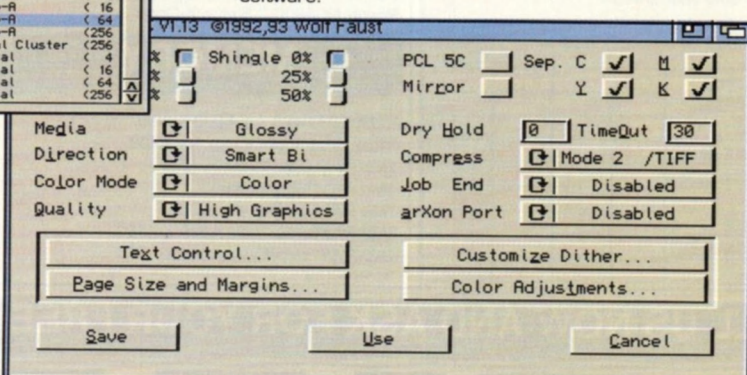
The brightness, contrast, gamma and colour levels of the printed output can be adjusted individually for cyan, magenta, yellow and black. It is this part of Studio that takes the most time to learn about.



The PinDriver includes specific colour and mono support for Star, Panasonic, Oki, Fujitsu, and Citizen printers, plus any other printers that are Epson LQ compatible.



Plenty of dither pattern options enable you enhance the printed graphics output from 99.99% of all Amiga software.



The DeskPref programs are able to control all the features built into all DeskJet printers, including such erudite features as the compression mode and the type of media on to which you are printing.



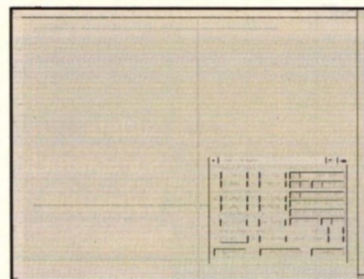
Canon (UK) Ltd was well chuffed. Wolf had laid a golden egg, although he didn't realise it at the time. He was just a poor medical student. How was he supposed to find the time and money to develop and market this product commercially? Luckily he worked for a big German Amiga distributor in his spare time, so he had quite a few contacts. Almost immediately MacroSystems took the bait and work on drivers and support programs that would get the best out of the modern crop of high quality printers started in earnest.

Hewlett-Packard support was the most important requirement because the standard Amiga drivers had fallen way behind the times. But Hewlett-Packard in Germany was not particularly interested in the Amiga. Every time Wolf tried to get developer information from them, the door was politely but firmly slammed in his face. There's none so blind as those who do not want to see.

## studio

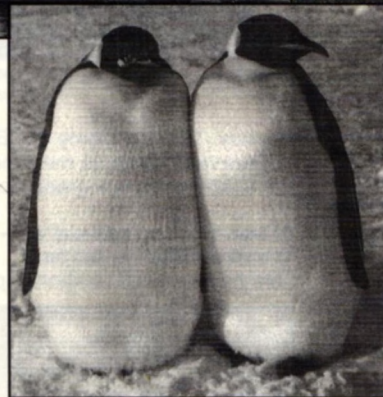
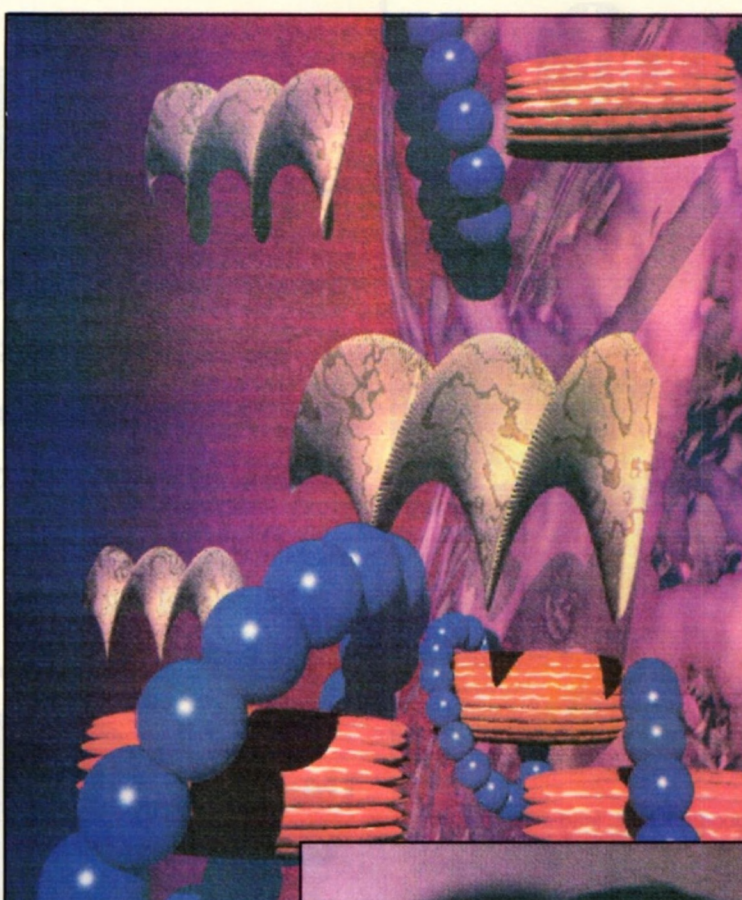
Nevertheless, development continued from what could be gleaned from the printer manuals that were available. Eventually an open German developer conference was organised by Hewlett-Packard and Wolf went along to show them what he had. They got a little bit excited about it to say the least, and at last let him join in the developer scheme. Which is when he found out that some new printers were on the horizon and Studio, as it had already been named, could not be released without support for these printers. I'm talking about the 550C, 1200C, and the LaserJet 4 series.

Studio was eventually released in January 1993 after more than two years of development. Along the way it had gained support for absolutely all Hewlett-Packard printers, a special



The Studio picture-printing program is able to print in up to 16.8 million colours or 256 shades of grey. Without help the Amiga on its own can manage only 4,096 colours and 16 shades of grey.

400 dpi mode for the Ricoh LP1200, support for the ProPage Offset control, special PageStream drivers, a proper one-pass 48-jet mode for the Star SJ-48 mono bubble jet printer, another special mode for the colour Star SJ-144 thermal printer, another for the Epson Stylus 800 and support



These pictures were achieved from a colour dot matrix printer using Studio.

for just about every other Epson compatible 24-pin, 48-pin/jet or 64-pin/jet printer on the market today.

As Wolf's UK agent, I tried to get some UK distributors interested. Apathy. Ignorance. They didn't understand why it was needed. Don't forget that this product was 100% Amiga compatible and worked with all the latest printers and with all Amiga software that printed in the standard Amiga way. I knew that UK Amiga owners both needed and deserved this product, so I convinced Wolf to go into the cottage industry business and start putting together a UK package

the UK. British Amiga owners were reluctant to part with money for what they considered to be just a printer driver. Explaining to inquirers exactly why Studio is needed now takes up a major chunk of my workday. It's time I can little afford and it's a tough job because the ultimate reason is a visual thing. "See this picture I'm holding over the phone of some cat sick that the Amiga printed? Well, this near photographic quality picture of Madonna that I'm holding over the phone now is what Studio printed from the same file..."

## upgrades

But we're winning the UK battle, having just automatically upgraded several hundred UK, European and US registered users to the latest version free of charge and Wolf is not resting on his laurels. A version 2 is currently in development, planned for release in mid-to-late 1994 and some even more powerful features are being discussed. How does an automatic colour matching system sound to you? One of the biggest problems with Studio at the moment is that it is so powerful that the

sheer number of options are causing it to appear a much more complicated system than it actually is. Simplification without loss of power is something else that will come with the next version. That's not to say Studio is so complicated now, it just takes a little while to learn how to use. It helps if you read the manual.

Never in a million years did I think I'd ever become a software distributor. I'm a writer. Well, I get paid to write, let's put it that way. And if I hadn't written those few lines to Wolf three and a half years ago - and of course I take no credit for Studio, it is Wolf's work, the genius is all his - if I hadn't

himself. He could ship boxloads of them to me and I'd get it out there somehow, even if I had to (gulp) spend money advertising it.

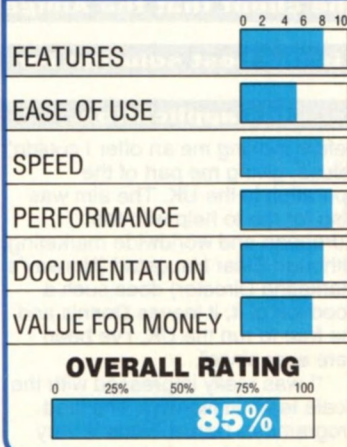
It was an instant success in Germany. With a buoyant Amiga market and the weight of MacroSystems behind it, Studio was quickly reviewed in the German press and started flying out. Not so in

written that letter, the joys of using the latest high quality colour and mono printers may very well have been denied to Amiga users worldwide. Funny how things turn out, isn't it? **a**

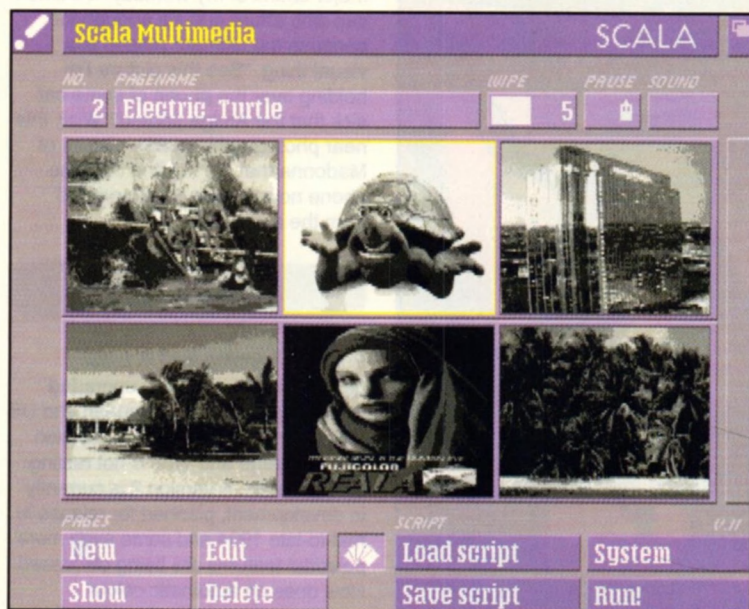
## INFO

Studio £49.95  
CanonStudio (shareware) £15  
Contact:  
JAM, 75 Greatfields Drive  
Uxbridge UB8 3QN  
Tel: 0895 274449

## Ratings: Out of 10







I recognise that turtle in the middle.

## How did you get involved with Scala?

"There were a number of things going on in Commodore that I didn't like. One that got me into deep trouble was the insistence of Bill Sydnes' (then VP Engineering in the USA) on putting IDE drives into the new product - the A4000. I was one individual that stood up both vocally and in writing objecting to it. I recall telling Medhi Ali (Commodore's President) on the phone, "You can say what you like but this man is wrong! You shouldn't be guided by him as this is the wrong way to go".

"The rest is, of course, history; they also took out the flicker fixer so no VGA output which is why it's done in software with all the virtual monitors rubbish".

"The argument created some animosity as you may imagine. Then the guys in Norway invited me over to show me what Scala products were coming. They showed me the new product, known now as Scala Multimedia, talked about InfoChannel and took me up to the mountains skiing, which is my great passion and weakness,

**You just have to show the client that the Amiga is the best solution for his application.**

before making me an offer I couldn't refuse, giving me part of the operation in the UK. The aim was also for me to help with the European and worldwide marketing, although Einar Haugstad (Norway's Marketing Director) does such a good job of it, it leaves Dennis and me free to run the UK. I've been here ever since".

"I was really impressed with the Scala team in Norway. The lead programmer Daniel Bloch is very knowledgeable and also a very

good guitarist, lead and bass (not that it is particularly important but I like to give him a plug). There are about 15 working in Norway at present, although they have some contractors from time to time. Jon Bohmer is the head of the organisation (and he's still only 25, it makes you sick doesn't it?) directing the product's development".

"Now there are eleven of us here at Scala UK and things have really kicked off for us - mainly the hotels and commercial markets. We have some quality resellers now (Thorn EMI to name but one) and the hardware is good these days".

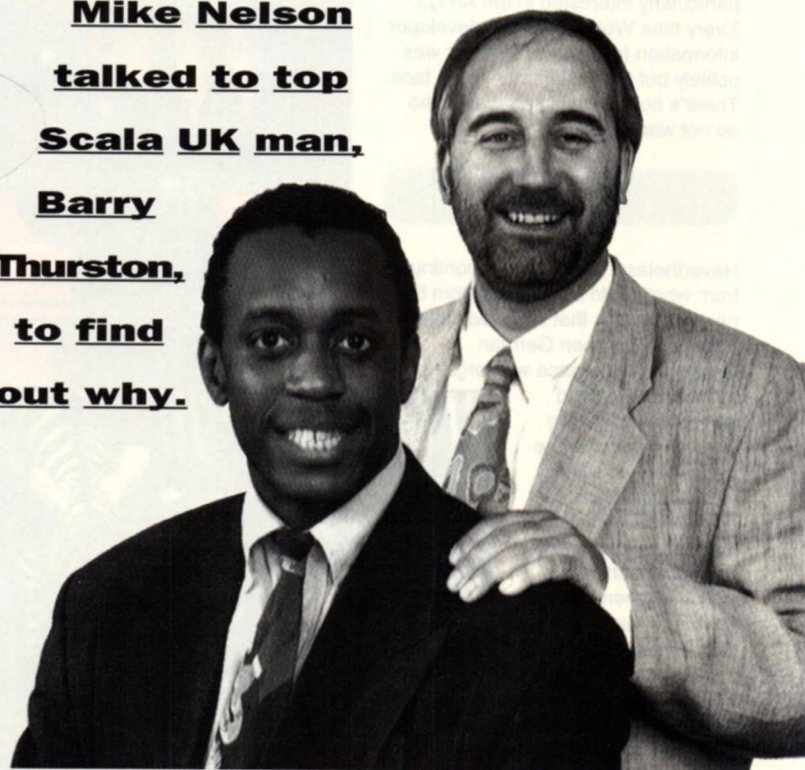
## How do you rate the Amiga and get around the pro-PC bias?

"The Amiga is the best delivery platform around for information graphics - more powerful than PCs or Macs. The best way to sell the Amiga is as a solution to a problem and if you approach the customer in that way, there's no problem... If you just say it runs on a multi-tasking system and you pick the best platform for the job, you should get a result. Many IT managers have closed minds to other platforms - we tend to be very conservative in the UK to new things and also there's the "It's a cheap games machine so it can't be any good" attitude. Uninformed rubbish! You just have to show the client that the Amiga is the best solution for his application."

"The Amiga is becoming a very serious machine and with these 24bit graphics cards, I'm not even sure that AAA is necessary. Commodore need to concentrate on providing good quality hardware with good availability. Let the third parties do 24-bit cards which is what they do best. I get the impression that Commodore are moving away from doing peripherals which people like Helfrich and GVP do well enough

**One European multimedia Amiga product that has made an international impact with bigtime corporations is Scala.**

**Mike Nelson talked to top Scala UK man, Barry Thurston, to find out why.**



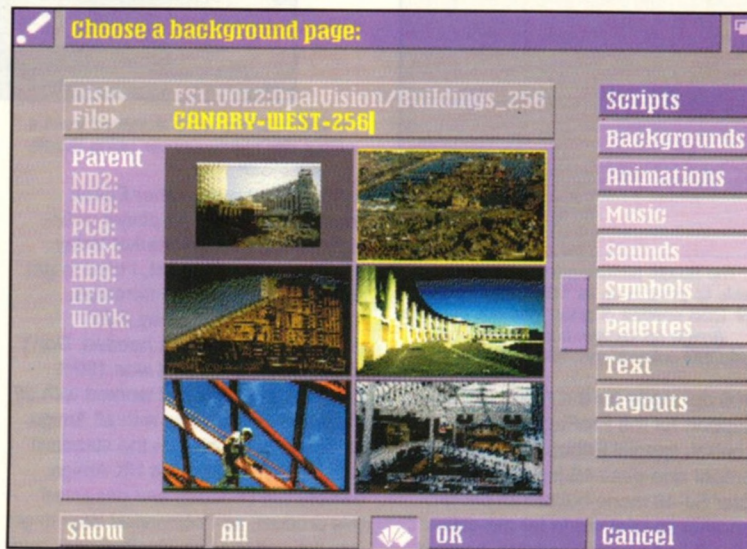
Scala UK is headed by a two man team, Dennis Phillips and Barry Thurston, both senior ex-Commodore managers.

anyway. The main force of CBM development must be machines like the CD32 which is a great product".

## How does being ex-Commodore help?

"We have a good relationship with

Commodore and knowing how their internal structure works is an advantage when dealing with them. David Pleasance is a good guy. He and I have cracked a bottle or two, so that helps as well".



The quality offered is incredible.



# BIG time



## Can you work with the CD32?

"Well, eventually yes but first we have to finish MM300 and InfoChannel 500. Then we will be adapting MM300 as an authoring environment for CD32. The CD32 serial interface, developed by UK developer Mick Tinker, will also help as it allows CD32 to become a low cost delivery platform for InfoChannel".

"But for now we will just watch the CD32, Sega, Nintendo battle with interest".

## Scala is being ported to the PC. Does this spell doom for the Amiga?

"Not at all. We've been under a lot of pressure to do a PC version and I have to say we've been pleasantly surprised with what we can do with the PC. In some areas we can do transitions better than on the Amiga, but largely you can't match the performance of the Amiga, particularly multitasking".

"Windows is a dog! A bit like an elephant balancing on its trunk really." Bill Gates has wove this magic spell around Windows and everyone thinks it's great when all it does is hide DOS from the user. Scala won't run under Windows because Windows is too slow but you will be able to launch Scala

product and the dongle is a way around the problem. People who rip off software kill companies like Scala. It's as simple as that and we make no excuses".

## What about the low end stuff?

"The green box consumer level Scala is in limbo at present and is a product that needs addressing. HT100 is selling really well and now we've reduced MM200 to £149.00. Well...

## What would you like to see from Commodore?

"Very important for us, as developers, is for Commodore to provide us with tools and technical information so we can continue to develop. We need more power for the users - let developers make the peripheral products and with Commodore, work on ways of integrating them. You take an A4000, with SCSI, a Rainbow III and Sunrise Ad1012/Studio 16, Emplant, AdPro, Morph Plus, Scala of course etc...it's a phenomenal system".

## And retargettable graphics?

"Absolutely. Rather than writing a driver for each 24-bit board, we'd prefer to support a standard

Xerox, Canon, Renault, JVC, ICI, the Co-Op, British Telecom, Granada, 3M, IBM, NCR, Toyota.

One of my favourite customers is Bovis Construction who chose Scala on Amiga for business presentation. This they did after looking extensively at many solutions on a variety of hardware platforms and now present to major clients who I understand are suitably impressed.

So there are some really good names there and I haven't even mentioned the video market. That would need a separate article.

## conclusion

Scala is a unique product which typifies the Amiga and its strengths;

a multimedia machine, with a superb product like Scala to power it means there is certainly nothing to yet touch it in the presentation/titling area. Oxxi's Video Stage Pro looks like giving it a good run for its money in the video world. But Scala has already made such a worldwide impact in growing areas like cable TV that it is becoming, like Newtek's Video Toaster, a reason in itself why Amigas are being bought. A few more products like Scala and the Amiga would be a truly dominant force in multimedia. **a**



The menu from Scala Multi Media really shows what they have on offer.

from Windows and drop back via a hot key".

"InfoChannel will continue to be Amiga only for the foreseeable future as the lack of multitasking means it's tricky to implement on a PC. Mike Sinz has recently joined us from Commodore and is working on a kind of multitasking kernel that sits over DOS for the PC version. Whether it will perform as well as the Amiga remains to be seen".

"I think it's safe to say we are all Amiga people at Scala so we certainly will continue to support it".

## Why the dongles?

"Piracy would cost us a lot of money which we need to develop the

software kernel. We'd love to see retargettable graphics".

## Who is into Scala?

"We have been having a quiet revolution with Scala and Amiga in the corporate market. We have hotels using them for guest information. They include the Hilton, Sheraton, Copthorne, Marriott, Trusthouse Forte, Best Western, Novotel and other prestige hotels such as Gleneagles and the Mayfair. Then there is employee and public information, point of sale etc. Makro, DFDS Seaways, McDonalds Restaurants, Philips TV Factory, Shell Oil, The Swedish Parliament, Ford Motor Co, General Motors,



Scala's programs bring real power to the Amiga user.

operation. Initially the plan was to lie low for a while to determine the marketplace and develop a strategy for exploiting it. Their idea of lying low still meant selling around \$500,000 worth of products. However, they were helped along greatly by Commodore's bundling Scala with the A3000. This was somewhat ironic when you remember Commodore's own less than successful efforts at developing AmigaVision!

In 1992 there were 22 Scala dealers in the USA. Now that figure has more than doubled to

an elite group of resellers who have to fork out \$2000 just for the privilege of selling Scala and InfoChannel. This ensures they really mean business but the cost is claimed to be easily offset by the higher than average profit margins afforded to these VARs - "Value Added Resellers" - as they're known in the trade.

Nevertheless, in a major business deal, Scala are teaming up with Ameritek, one of the major telecommunications companies in the Mid-West to provide their InfoChannel system. The idea is that they will use their considerable sales force to sell the product to over 200 of the top companies in the region and already Ameritek has shown quite an interest in buying a piece of Scala. Most US communications companies are falling over themselves to get into the expanding world of cable TV and Scala is just one avenue.

Although most of the Amiga development occurs in Norway, Scala are porting their product onto PC machines and have poached a number of key Commodore personnel to work on the project. These include Mike (Mr Workbench) Sinz and Peter (Intuition Guru) Cherna, although their job is to develop a DOS kernel that acts like the Amiga in terms of multitasking. The enticement of owning stock in the company adds an extra incentive to employees, as well as the lure of huge corporate clients like GM, Ford, Xerox, J C Penny and others. Scala US sees the US market as much easier than Europe, with only one language to worry about and fewer geographical barriers to business.



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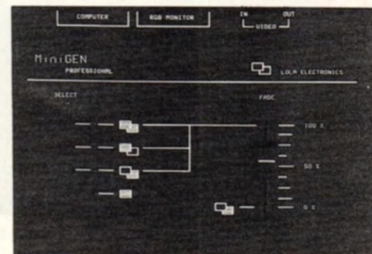
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**T**he next time you jump into the car to go out for a bag of chips, don't bother. You're probably driving around with a bag of chips already, superior in every aspect to those sold at Cap'n Nemo's.

Computers have revolutionised car production, from design and construction to the ordering of parts for a 12,000 mile service. The result of this is that the new cars of the 90s will rely on computers more than ever - so, by default, will the drivers of those cars - for everything from the smoothness of the engine's tickover to the warmth of the passenger's feet and the operation of automatic safety devices.

Can this dependence on silicon be healthy? If the Amiga can throw a wobbly when it's just trying to draw a straight line, should a car's computer systems be trusted to keep us safe, when booting it through a nasty bend?

## security

The most widespread use of chip technology in the car is for controlling safety systems.

The anti-lock braking system (ABS) was originally developed for use on aircraft, which often have to stop, quickly, in extreme weather conditions. It allows the brakes to bite without letting the wheels lock, which causes skidding.

The processor checks many times every second for wheels locking and, if one does, it releases the brakes from that wheel for an instant. This means that you can steer while braking hard, which you might need to do if a glazed-eyed Nintendoholic ran out from behind a parked car. Of course, you might be tempted not to bother...

Most motorists don't want anything which will blow up, but that's exactly what happens to the safety gadget of the moment: the airbag. They were invented years ago and should have been saving lives before now. However, the legal system has kept it out of our cars, because

the airbag mechanism involves an explosive, which took a long time to meet safety approval.

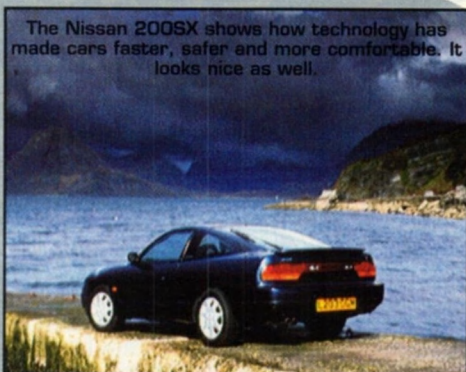
If an impact is detected, a small detonation releases the bag, filling it with pressurised air from a canister. This balloon then covers the steering wheel and protects the driver from injury. Not only that, the driver - or passenger - can then use the airbag as a condom, if it fits, for safer sex as well as safer motoring. Every motorist should carry one.

The last up-and-coming device for life preservation is the seatbelt tensioner. This could bring tears to your eyes if you aren't careful, because in the event of a crash a steel cord tenses the seatbelt. This locks the passenger and driver in place and should stop them from hurting themselves badly.

That's if they have the belt around them properly. If not, any male passengers may leave the scene of the accident singing soprano.

## top gun

Nissan has a different theory. "Safety devices such as seat belts or air bags can be very helpful in the event of an



The Nissan 200SX shows how technology has made cars faster, safer and more comfortable. It looks nice as well.

accident. However, accident prevention is inherently superior," according to the company's Technology Newline service. Nissan has started fitting its Bluebird range with head-up displays (HUDs) in Japan, just like the ones seen in fighter aircraft.

This doesn't allow you to shoot missiles at people ahead, but it does mean that you can glance at vital features of the instrument panel, such as digital speedometer and a CHECK message (this lights up when some warning light on the instrument panel has been lit) without looking down at the dashboard.

This saving of downward eye movement could be crucial when travelling along a motorway, as you may travel 15 metres during a glance at the dash. You then have to look up before being able to refocus on the road ahead and respond to the M25's instant carpark-like jams. If you're looking down instead of ahead, you may miss the carpark attendant selling tickets - or, more seriously, buy your ticket by driving into the back of a lorry.

## chipping

General engine management, from emission of greenhouse

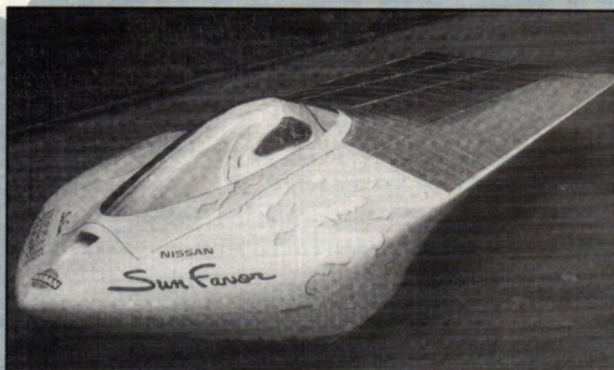
gas - usually to protect the engine from a harmful tendency to get heavy with your right foot - but there is a loophole, using a system aptly known as "chipping." One computerised engine management unit is removed and simply replaced by another.

While at Goodwood recently, I had firsthand experience of what chipping a car can do for its performance. Two drivers at Goodwood had Ford Sierra Cosworths. This awesome road car is the most frequently chipped car in the world. Yet one of them was untouched by alien silicon. It still managed to lap Goodwood in 105 seconds.

But the other Cosworth was

# Micro

**Ashley Cotter-Cairns tracks down today's automotive computerisation to find what it's going to do to our driving future.**



The Nissan 'Sun Favor' concept solar car - Fish & Chips?



This Cosworth has a chip which makes it go faster and faster and faster and....

gases and fuel economy to that old favourite, performance, is the most important recent technological advance in motor cars. Most manufacturers limit their cars' performance, rev range or turbo boost using an

chipped to hell and back and had a rebuilt engine block and racing slick tyres. Thanks to these changes, this superCosworth developed 500 horsepower. It lapped Goodwood in just 91 seconds, beating every other car



there (including a Porsche 911, Carrera 2 and Alpine's Lamborghini Diablo, which was quite fast enough for my liking...).

This is the extreme end of chipping. But cars can be rechipped more mildly, to give them more overtaking 'grunt' or better fuel economy. Many manufacturers release different versions of the same car, with rechipped engines as well as upgraded equipment making the distinction.

## lead time

Robert Furio, Market Development Manager for Land

# Drive

Rover, had plenty to tell me about the influence of technology on car makers at the recent Earl's Court Motorshow.

"The most important way it has changed the market is in the lead time for new product development. Before the days of computer aided design, a model or range would take as long as six years to bring to the showrooms. Now, we can have one ready in about a year to eighteen months."

"Engine management is very important. With a computer-controlled EMU, slight changes can be made just by re-programming, so if, say, an European Community law changes, we can have the cars ready to meet that new standard very quickly."

But is it the engine alone which benefits from the computer age?

"No, there's a lot more to our cars than a brainbox. We've recently developed off-road ABS. This is a first and very difficult to do, when you consider that the car may be buried in mud or crawling up a snowy mountain. Traction control is another vital feature. If a wheel starts spinning, the power is reduced from that wheel and increased on the others.

"There's also our revolutionary electronic air suspension system. The computer controlling this

pumps air into and out of our air springs, which alters the ride height according to the situation the car finds itself in. The driver can also exercise some control over this feature."

"We've also developed an electronic key, which operates the alarm using a different signal each time. This stops a thief using an alarm signal reproducer to gain access to the car." Will this mean Land Rover can do away with traditional keys altogether?

"Well, no, it's not something we can do just yet. Many of our cars are genuinely used in off-road situations. Imagine what would happen if they lost the alarm key in the middle of the desert..."

I wish I had asked why someone would bother to lock their Land Rover in the middle of the desert!

## i.c.e.

Many third-party companies specialise in making your car a more entertaining place - In Car

inch the supercar; but it's Alpine's other car, the Vauxhall Frontera, that wins the fight in the in-car department.

Alpine's Sales and Marketing Director, Graham Johnson told me: "The Diablo is a show car, it makes people take notice. But inside it's not our flagship demonstrator. There is a very nifty digital-to-analogue converter, which makes the system sound very pure, but with 450 horsepower of V12 blaring away over your shoulder, it's not



The flagship Range Rover Vogue LSE. It's bound to be a hit, thanks to its unique air suspension and sharing a name with Madonna's best ever record.

always easy to hear what's on the CD player!

"The Frontera is the business. There's £6,000 worth of equipment in there. The bass is awesome, we've worked very hard to bring it forward so the system doesn't sound like all of the heavy artillery is at the back. We've even replaced the steering wheel with one which incorporates all of the system controls, with an infra-red link to the console. This allows safe operation while travelling at speed."

In-car comfort and features are another area in which technology has improved today's

assisted steering, which takes the armwork out of parking, tilting steering column for more comfortable driving, electric windows, central locking and electrically adjustable and heated wing mirrors, all electronically controlled.

## solar

Nissan's Sun Favor (note the American spelling) may look like a fish, but it's so advanced that they haven't even got a colour picture of it yet. It's part of the Nissan research and development team's quest to come up with a form of transport which doesn't rely on burning fossil fuels. In this case, the 'tail' of the car is covered with solar panels.

We probably won't see the Sun Favor or any of its spinoffs this side of the year 2000, but perhaps one day cities will be filled with sleek, environmentally-friendly cars. How will Londoners find enough sunshine to run them?

## 4x4 Amigas

There are currently no Amiga components inside a production car. But the day may well come. After all Motorola, the manufacturer of the 68000 range, makes chips which are also used in automotive technology. Imagine replacing the CD system in your car with an Amiga CD32. You'd then be able to plug in an LCD screen and access an atlas, hand it back to the kids and let them play games and still listen to your Vivaldi CDs as you drive down the motorway.

Will Amigas ever manage engine systems? I doubt it. There would be far too many computer hackers writing new engine management programs, uploading them to bulletin boards and adding scrolly messages. So, when you turn the key, instead of a beautiful new engine roar from your Sierra Cosworth, you might hear someone called Stefan saying hello to someone else called Jurgen or simply read the message across the odometer "Your Amiga Cosworth is Alive!"

As good a reason as I can think of to keep the Amiga firmly OFF the road. **a**

Alpine Tel: 0908 611556



The car on the left is awesomely quick. The one on the right is awesomely loud. Both belong to Alpine.

Entertainment (ICE). Alpine is one of the leading aftermarket car stereo makers and fitters and often gets commissioned to 'do the works' on a car.

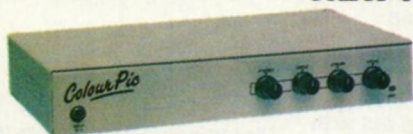
To demonstrate its expertise in this field, Alpine has several cars which are fitted with top-end systems. The rather sexy red Lamborghini Diablo in the picture looks (and drives) every

automobile. Nissan's sports car range, the X series, offers high levels of equipment as well as the ability to slingshot you around the sun and achieve time travel. Well, maybe they don't go that fast, but climb into a 200SX or 300ZX after driving your Ford Escort and you'll be depressed (into the leather seat, that is).

The 200SX comes with power



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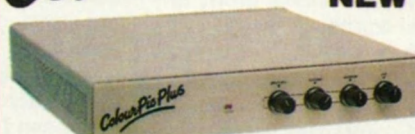
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- \* SuperPic allows you to switch between Amiga display, framestore and video outputs on your standard RGB monitor at the touch of a button.
- \* SuperPic is shipped with Cabaret 24-bit image processing software.

SuperPic RRP £599 inc VAT  
SuperPic AniMate RRP £699 inc VAT

## ColourPic Plus NEW !



**ColourPic Plus**, JCL's latest addition to their Amiga real-time colour video digitiser range, brings you the most powerful digitiser available to the Amiga user in its price range. A professional machine engineered to the highest standards and using the latest technology, ColourPic Plus combines all the features present in ColourPic with AniMate as standard and an impressive number of new features and new software.

The Impossible? - ColourPic Plus can do it! Combine a framestore picture in 64,000 colours with text on an Amiga database display - without a genlock! With the optional 'GrabIt' software from JCL and a prepared database control language module you can add pictures to your personnel file or parts list. Your database pictures could even be animated!

- \* ColourPic Plus can capture lo-res, interlace, hi-res or hi-res with interlace images and convert them to HAM, 32 colour, 16 colour and monochrome IFF files.
- \* ColourPic Plus is shipped with 512K RAM and can be upgraded to 1MB for more animation frames and even higher resolution modes.
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AniMate, for ColourPic and SuperPic, adds a whole new dimension to video digitising - colour animation. The complete AniMate package upgrades the digitiser to 512K RAM using a special RAM expansion card with time marker control logic and includes control software and manual. AniMate provides a

simple and complete method of producing short sequence colour animated images on an Amiga, where the images come from live video such as a camera or a VCR. Simply point a camera at a moving object, select ANIM RECORD/SEQUENCE and press the space bar to capture a series of real life movements.

- \* ANIM SET options include frame delay and first field hold off.
- \* ANIM RECORD options include sequence record and single step record.
- \* Select ANIM PLAY/CYCLE and the recorded sequence is repeated.
- \* ANIM PLAY options include sequence, single step, mouse scroll, cycle and ping-pong.
- \* Sequences recorded from a VCR may be joined together to produce ANIM files.
- \* The interval between recorded fields can be set at any number of fields.
- \* The individual fields of an animation may be examined by using the up/down movement of a joystick.
- \* Fields from an animation sequence may be converted to standard Amiga IFF format and then built into an ANIM format file for replay.

Upgrade your ColourPic or SuperPic for £150 inc VAT

## Cabaret

**CABARET** the image processing package shipped with ColourPic and SuperPic provides image import facilities together with colour and monochrome image processing functions to modify existing pictures. Cabaret has a wide range of filter and masking options to enhance pictures and produce interesting effects.

- \* Cabaret will import and display HAM, EHB, 32, 16, 8 and 4 colour pictures plus Monochrome and Threshold images in normal and overscan modes.
- \* Cabaret will SAVE and LOAD images in standard IFF format, plus a wide range of other formats including TARGA and AIM.
- \* Cabaret will produce X & Y flips, mirror images, multiple images, magnified parts of an image and control colour balance, contrast and brightness.
- \* Cabaret works on all Amigas with 1 MByte or more of memory.

**CABARET PLUS** software, which needs 3 MByte of memory to make full use of all facilities, has all the features of Cabaret - PLUS

- \* Extra filters including Uniform, Kuwahara, Posterize, Median and Gamma.
- \* New features including Emboss, Dropshadow and Combine.
- \* Interlace and hi-res modes AND Save in 24-bit IFF!

For the user with less than 3 MByte of memory the Cabaret functions may be used without the 'Plus' features.

Cabaret RRP £29.95 inc VAT Cabaret Plus RRP £89.95 inc VAT

\*ColourPic, SuperPic and ColourPic Plus are available from selected dealers or direct from JCL.

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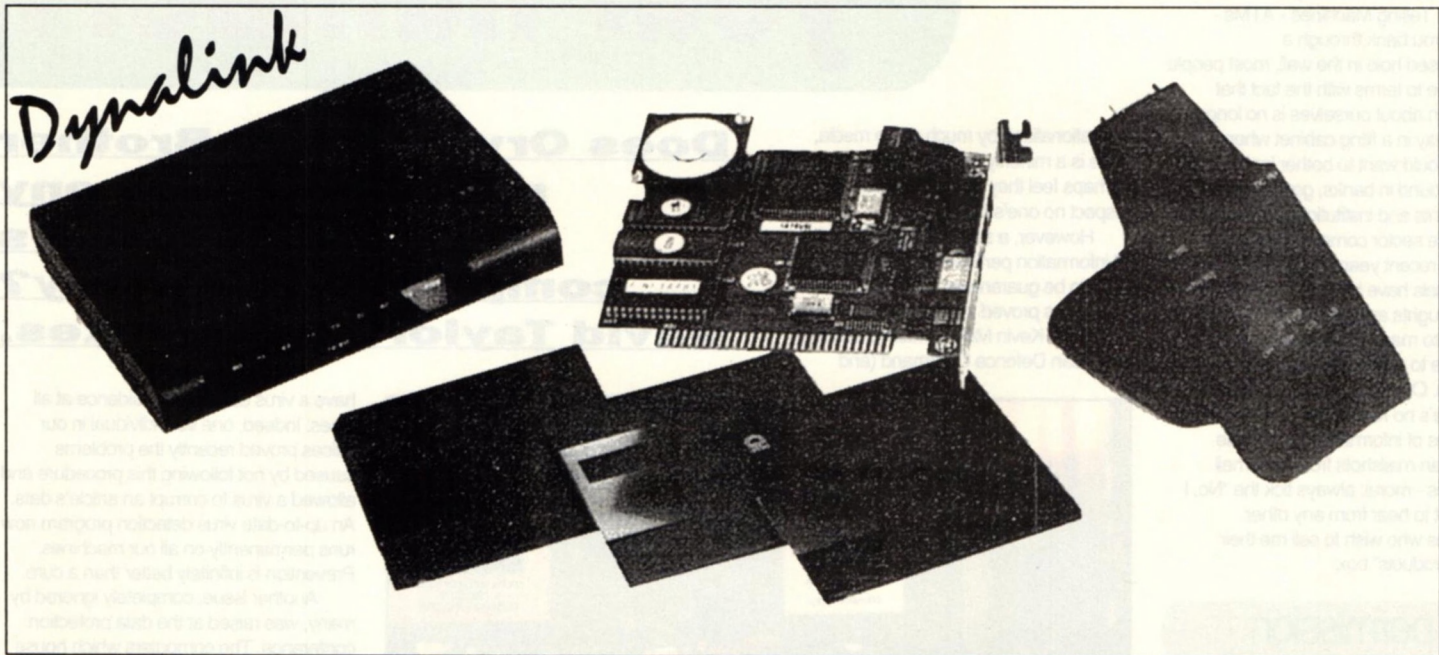


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# Who's got your number?

**T**he technological revolution leaves many people stunned and scared. Technofear, however, is diminishing. Although a Luddite minority still shuns Automatic Telling Machines - ATMs - which let you bank through a computerised hole in the wall, most people have come to terms with the fact that information about ourselves is no longer locked away in a filing cabinet where nobody would want to bother looking. It is spread around in banks, government departments and institutions like hospitals and private sector company files...

Over recent years the personal details of individuals have been transformed into sets of noughts and ones and then traded between so many computers that it is impossible to guess just who knows what about you. Or where, how or even why...

There's no reason for paranoia; most exchanges of information are for little reason than mailshots from junk mail companies - moral: always tick the "No, I don't want to hear from any other companies who wish to sell me their useless products" box.

## permission

This constant flow of data does, however, raise some interesting questions. Should people with whom we have no contact be allowed our personal information without our express permission? Have we allowed the definition of privacy to change or are electronic communications forcing a more liberal concept upon us?

The Data Protection Act 1984 was implemented to protect the rights of both data users and the subjects on whom data is held. The Act was last revised in March 1992, but remains so full of loopholes and vague clauses that it appears to be more a set of guidelines which it is pleadingly hoped data holders will follow.

At a recent conference on data protection, one speaker argued almost convincingly for the introduction of a centralised data bank to store all details and thus help avoid mistaken identity or fraud. Shortly after, the Government announced that it was considering introducing a computerised system of identity cards for those on Social Security. The thin end of the wedge of Big Brother's computer watching you?

While the phenomenon of hackers and illegal access to computer systems is

sensationalised by much of the media, there is a minority of malevolent users who perhaps feel they do no harm but who respect no one's privacy.

However, a single computer holding all information pertinent to a person would have to be guaranteed secure, something which was proved impossible two decades ago when Kevin Mitnick hacked into the American Defence Command (and



Royal technofear... Princess Anne opening the data protection conference, voiced her concern that "Technology has outpaced our ability to manage it."

inspired the film War Games).

Twenty years on and innumerable (in)famous hacks later, no system can be declared 'safe'. A more recent film, Sneakers, also tackled the subject of electronically accessed information. Though technically inaccurate, it did make the point that information has become one of the most important sources of power and one to be protected from abuse.

A recent survey in the US proved how simple it was to access personal information, when private details, including financial, of the movie producer George Lucas, among others, were obtained electronically.

Anyone who stores information on a computer and knows the data is either personal or confidential should take the necessary steps to make it as secure as possible. For companies it is imperative

## Does Orwell's Big Brother nightmare bear any relation to today's computerised reality? David Taylor investigates.

have a virus detector in residence at all times. Indeed, one lax individual in our offices proved recently the problems caused by not following this procedure and allowed a virus to corrupt an article's data. An up-to-date virus detection program now runs permanently on all our machines. Prevention is infinitely better than a cure.

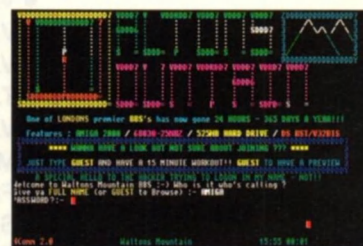
Another issue, completely ignored by many, was raised at the data protection conference. The computers which house this information must also be physically secure. A multitude of electronic programs will not stop someone picking up the machine! One delegate also relayed a story from a company for which he had worked that suffered a disaster from lack of foresight - a storm one night caused a leak in the roof which destroyed the electronic equipment and the software programs the company were developing, creating hundreds of thousands of pounds worth of damage. Data protection then has become a necessity. A backup of all data is needed

and all must be kept secure by any means available. A little care can avoid a lot of problems. To help, AUI has rounded up the best protection programs around and included a low level password program on this month's Superdisk. John Veldhuis's

that certain files are not accessed by the competition. Here the question of electronic security moves from the area of personal privacy and into the business arena, where mistakes may mean a great deal of money.

## virus

Password systems can be installed and encryption programs used to try to ensure confidentiality. That's why you'll never find a BBS or any other system that can be accessed externally without a password. However, although these can help to avoid theft or misuse, data protection needs to range far further than this. Nowadays, the question of virus infection is perhaps even more important than the one of hackers. With the proliferation of viruses in existence, any user should always retain a copy of vital work on floppy and



No system accessed from outside would be complete without password protection.

latest version of his excellent Virus Checker is also there.

After all, it is better to be safe, than sorry. Tacky, but true. **a**

**B**ob Hay of FAST has pointed out the enormous cost that lack of protection or illegal copying of software. "Whilst this year has seen the first ever reduction in piracy, the UK alone still saw an estimated £300 million stolen last year. The figures for Europe and world wide are even more astounding, \$4.6 billion and \$11.86 billion respectively. There is obviously still a great deal to be worried about."

"As far as leisure software is concerned, cartridges were seen as a solution, but this physical protection has now been negated. We have evidence of copying devices allowing cartridge games to be converted to disk and then copied in the normal manner. Even CDs are suffering already, despite 3 gigabytes of information being involved in one of the cases we've investigated."

"There's no doubt that a number of companies have been hemorrhaged by the effect of software theft, especially within the leisure contingent. Many hackers are frustrated programmers, but how can they expect to find a job, when it is their very efforts that are causing redundancies?"

Software piracy is the very real manifestation of data theft. It is here that companies are forever trying to stay one step ahead of the hackers, before they cause the collapse of more and more software houses.



# Proceed with caution

## Gideon Overhead offers some Public Domain security programs and some advice on how to use them.

**I** imagine you are developing a program and you do not want that program to be used by any other person. You can do one of two things. Firstly, you can lock that program away so nobody else can get it. Secondly, you can encode that program so that if someone did get hold of it they would have to decode it before use. To make the program even more secure, you could both encode the program and physically hide it away.

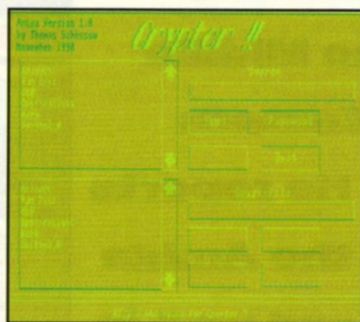
If you have an Amiga 4000 or a PC there is a lock on the front of the case that will disable the keyboard and mouse. This is fine for people in the office whom you don't want playing with your computer, but for people who know a bit more about computers, there are plenty of ways of gaining access. For example, the hard drive can be taken out and put in another computer.

The way almost every encryption program works is by using an algorithm to encode the data. First, a password must be entered - which you had better not forget!. The program then encodes the file. To decode the file you simply have to enter the right password and it is de-scrambled for you.

I have searched the PD libraries to find the best encryption software. Each program has been tested to see if it both encodes and decodes properly both text files and executables. Those listed below meet these criteria.

The Data Protection Act has a set of guidelines which can be found at main libraries but not always on company databases.

### cryptor



Cryptor's slick but rather sickly looking front end.

This program has a nice (if rather green looking) front end and is used mainly with the mouse. The keyboard is employed just for entering the file names. Cryptor works but is a little fiddly to use. Your password has to be entered

**A small window pops up with a picture of a key in it. This key speaks to you via speech bubbles.**

on a black screen and doesn't request verification. So if you are not sure you have typed it in correctly, there isn't a second chance to check. So treat it with caution.

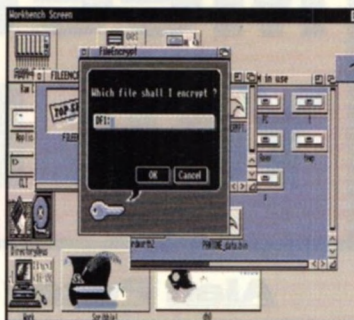
### file encrypt

The programmer decided to write this encryptor after one he was using didn't work very well, leaving his file half encrypted. He has put special emphasis on the graphics as the Amiga is a strongly visual machine. When run, a small window pops up with a picture of a key in it. This key speaks to you

via speech bubbles. ("Hi Key, how are you today?").

File Encrypt is very simple to use and asks you such questions as "What to want to do, encrypt or decrypt?". The decision is indicated by a click of the mouse.

The program works perfectly, the only small irritation being that you have to type in the path and name of the file you want to encode. File Encrypt doesn't use an Asl requester.

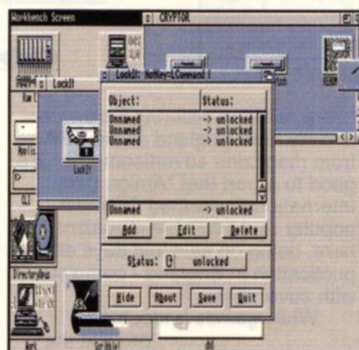


File Encrypt's friendly window.

### lockit

Lockit is a little different from other encryption programs as it can as well as encode files, lock drawers, so anything behind them cannot be accessed.

The best thing about Lockit is that it doesn't use passwords. First the program is used to lock the files or drawers and then you quit it.



Attempting to lock one of the hard drive's directories.

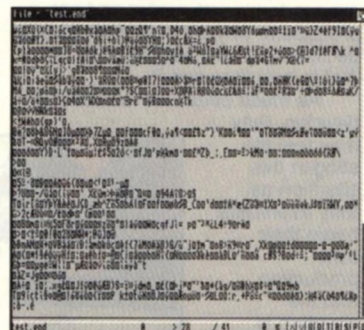
If you try to access the drawer via Workbench, an error message tells you "This drawer cannot be opened".

**If you get the password wrong three times, it will lock up.**

If accessed through Directory Opus, it appears that the directory is empty. I have not encountered any problems with this program but I am still unsure about locking away directories which contain huge numbers of precious files. Once again proceed with caution.

### password

This tiny program, only 2K in length, is an excellent idea. Simply place the program in your C directory. Then create a tiny ASCII text file just containing your password. Put this in your DEVS



A successfully encrypted ASCII text file.

directory and name it PassWord.psw. Put the PassWord program in your startup sequence, preferably at the top, and reboot.

Before the Amiga continues with the startup sequence, it will ask you for the password. If you get the password wrong three times, it will lock up. This is a good deterrent but won't stop people with a moderate knowledge of the Amiga. For example, you can bypass it by booting from df0. Nevertheless an interesting idea and useful too. **a**

## Encryption programs

**W**hen using encryption software it is important to think a bit before you start playing around with them. If you are not sure what you are doing, it may be a good idea to keep a backup of the program/s. This does defeat the object perhaps of keeping your data secure, but until you are certain you can use the encryptors properly and remember the passwords (yes, it is very easy to forget them) then don't encode a large number of files. Yey again, my advice is "Proceed with caution." Be cautious about how and who you allow access to your data and how you yourself use the encryption programs.



**I**n Abu Dhabi in the United Arab Emirates. I was sorry to hear that the Abu Dhabi Amiga Users' Group which I started in 1988, had finally sunk without trace and the Amiga dealership there has virtually disappeared too. Shops selling Amigas were almost all independent with no company backup. A500s are still on sale, as well as A500 Pluses, A2000s and A3000s but there was no sign of newer AGA machines or the CD-32.

Even the most prestigious of high street shops will show you a list of pirated programs and manuals - for Amigas or PCs. Indeed, it is very difficult to find a shop with authentic originals at all.

Before you rush to contact FAST, reflect on the unusual situation of Abu Dhabi - and many other Middle and Far Eastern countries. They have never signed an international copyright agreement! So, what to us is definitely piracy, is perfectly legal and acceptable to them. Whilst they are predominantly users and not producers, why on earth should they be bothered with copyright; at least that is how they see it.

As these countries increasingly develop, they may feel the sting in this situation as they eventually begin their own production, and the situation is beginning to change. Saudi Arabia has already signed an

international copyright agreement and others are sure to follow. The Emirates are due to follow suit next year, but traders are already protesting that this will force prices to rise by 500% or more.

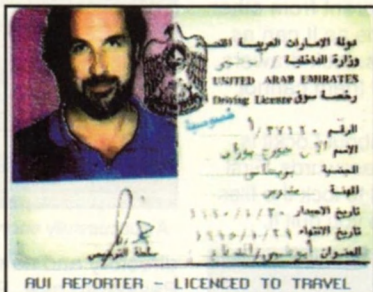
The UAE government has said that it will close all shops selling "copied audio cassettes, videotapes, books and computer software" after the new copyright laws are implemented in September 1994. Shop owners will have to provide documents proving that they have bought their goods from either the author or his agent. Although prices would undoubtedly rise, this situation would help Amiga owners here in the long term. At the moment, with virtually all

software pirated, programs are either old versions, bugged, virus-ridden or a combination of all three.

There is still a relatively thriving Amiga population, both in Abu Dhabi and neighbouring Dubai. With the lack of a good dealer network, most

## Fancy Meeting You Here!

**Alan Puzey recently travelled to the Middle East and to Eastern Europe. He reports on how the Amiga is alive and well in some unusual countries.**



006 3/4 - Have Amiga, Will Travel

users resort to ordering hardware directly from England or the USA from magazine advertisements. It's good to report that "Amiga User International" seemed the most popular and available magazine here, being on sale just days after its publication in England - complete with cover disk.

While games undoubtedly provide the widest use for Amigas here, there are one or two companies using them for desk top publishing and video work - albeit on a small scale.

poland

My next move was on to Poland - surprisingly a

country with an almost insatiable appetite for computers, but sadly little money to pay for them. Here, I was extremely lucky to meet Jaroslaw Miodzki, Editor-in-Chief of Poland's two most popular computer magazines.

here. Bajtek is the oldest computer magazine in Poland, starting in 1985 - making it similar in age to our own **AUI**. 'Commodore & Amiga', an exclusively Commodore magazine was read by 40% of those polled. Monthly readership of computer magazines in Poland is 81,000 for Bajtek, 67,000 for 'Commodore & Amiga' and 40,000 for 'Magazyn Amiga'.

The most recent issue of 'Commodore & Amiga' featured familiar articles such as 'Personal Paint' review, 'DeLuxe Paint AGA' review, 'Art Department Professional' tutorial and other familiar features. There was a full page advertisement for the Amiga CD-32, but as yet it had not been sighted in the shops. AGA machines were similarly thin on the ground, and with a cheese sandwich costing 19,000 zlotties, you



A little more daring than you would find this side of the ex-Iron Curtain?

obviously have to be a multi-millionaire to consider any computer.

The financial situation in eastern European countries such as Poland provides the answer to that old chestnut, "Where do all those old computers go, when new models appear on the home scene?" Sales

figures for Commodore's two most popular models in 1992 were: C64 - 95,000 and Amiga - 25,000.

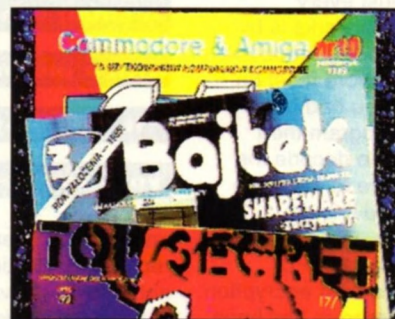
Software piracy is as illegal in Poland as anywhere else in the developed world but

this has not prevented it becoming the main source of programs. Some attempt to justify this is made by the Poles who contend that distributors will not consider sending legitimate programs here in the small quantity that are demanded.

As the whole world becomes more computerised, we are seeing developing countries as far apart as the Middle east and eastern Europe showing the same characteristics. The developing world will no doubt move in the same computer directions as us. Let's hope they don't make the same mistakes! **a**



Cover of the Polish magazine, "Commodore & Amiga."



The covers of the most popular computer magazines in Poland.

One of his magazines had just completed a census of its readers and published the following figures. I have rounded them off for convenience, but they make interesting reading.

The breakdown of 8 bit and 16 bit computers owned is some 55% and 45% respectively. Of the 8 bit machines; 50% are Commodore, 30% are Spectrum, 15% are Atari and 5% are Amstrad. Of the 16 bit machines; 50% are PC, 40% are Amiga and 10% are Atari. Ownership of computer peripherals produced the following league table: monitor - 70%, printer - 33%, hard disk - 27%, second floppy drive - 23% and modem - 4%.

80% of those polled read 'Bajtek' magazine and 55% read 'Top Secret', a magazine for games only. Jaroslaw Miodzki is Editor of both these magazines which are for all makes of computer, though there are always Commodore articles as they are such a popular computers



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- Parallel Interface
- Graphics Resolution: 360 x 360 dpi
- Epson, IBM, & NEC P20 Emulations
- Quarter Printing and Auto Set Facility
- Ultra Quiet Mode - 43dB(A)
- Colour Printing Standard - Swift 200C
- Colour Printing Optional - Swift 200
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RRP £259  
STARTER KIT £49  
TOTAL VALUE: £308  
SAVING: £139  
SILICA PRICE: £169  
+VAT=£198.58 - PRI 2490

**SWIFT 200C COLOUR**  
RRP £279  
STARTER KIT £49  
TOTAL VALUE: £328  
SAVING: £139  
SILICA PRICE: £189  
+VAT=£222.08 - PRI 2495

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**2 YEAR WARRANTY**

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SEE LEFT

**FREE DELIVERY**

• Citizen 120D+ - 9 pin - 80 column

- 144cps Draft, 30cps NLQ
- 4K Printer Buffer + 2 Fonts
- Parallel or Serial Interface
- Graphics Resolution: 240 x 216dpi
- Epson and IBM Emulation
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**CITIZEN 120D+**  
RRP £199  
SILICA STARTER KIT £49  
TOTAL VALUE: £248  
SAVING: £133  
SILICA PRICE: £115  
+VAT=£135.13 - PRI 2120

The Citizen 120D printer comes supplied with a parallel interface as standard. If you require a serial interface instead, please state ref: PRI 2125 when placing your order with Silica.

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• Citizen Swift 240/240C - 24 pin - 80 column

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- Quarter Printing Facility
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- Colour Printing Optional - Swift 240
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**SWIFT 240 MONO**  
RRP £339  
STARTER KIT £49  
TOTAL VALUE: £388  
SAVING: £189  
SILICA PRICE: £199  
+VAT=£233.83 - PRI 2560

**SWIFT 240C COLOUR**  
RRP £359  
STARTER KIT £49  
TOTAL VALUE: £408  
SAVING: £189  
SILICA PRICE: £219  
+VAT=£257.33 - PRI 2571

### 9 PIN 240 CPS 80 COLUMN



**2 YEAR WARRANTY**

**FREE! STARTER KIT**  
WORTH £49  
SEE ABOVE

**FREE DELIVERY**

• Citizen Swift 90 - 9 pin - 80 column

- 240cps SD (10cpi) 130cps Draft, 48cps NLQ
- 8K Printer Buffer
- 6 Fonts Built-in
- Parallel Interface
- Graphics Resolution: 240 x 216dpi
- Epson and IBM Emulation
- Auto Set Facility
- Ultra Quiet Mode - 45dB(A)
- Advanced Paper Handling
- Colour Printing Standard - Swift 90C
- Colour Printing Optional - Swift 90
- FREE Silica Printer Starter Kit

**SWIFT 90 MONO**  
RRP £199  
STARTER KIT £49  
TOTAL VALUE: £248  
SAVING: £109  
SILICA PRICE: £139  
+VAT=£163.33 - PRI 2290

**SWIFT 90C COLOUR**  
RRP £219  
STARTER KIT £49  
TOTAL VALUE: £268  
SAVING: £119  
SILICA PRICE: £149  
+VAT=£175.08 - PRI 2297

### 24 PIN 192 CPS 136 COLUMN



**2 YEAR WARRANTY**

**FREE! STARTER KIT**  
WORTH £49  
SEE ABOVE

**FREE DELIVERY**

• Citizen Swift 24x - 24 pin - 136 col

- 192cps Draft, 64cps NLQ
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- Colour Option Available
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### 9 PIN 144 CPS 80 COLUMN



**2 YEAR WARRANTY**

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WORTH £49  
SEE ABOVE

**FREE DELIVERY**

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- Graphics Res: 360 x 360dpi
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**TOTAL VALUE: £325**  
**SAVING: £126**  
**SILICA PRICE: £199**  
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### THERMAL 64 CPS 80 COLUMN



**2 YEAR WARRANTY**

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WORTH £49  
SEE ABOVE

**FREE DELIVERY**

• Citizen PN 48

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**What were the hottest products of the last twelve months for the Amiga? Ashley Cotter-Cairns chairs a judging panel for the *aii* awards.**

# This was the year that was

**T**his was the year, that was... the year that brought us the lowest popularity rating for a Prime Minister ever and loads of highly popular things to do with your Amiga. (The Amiga for P.M.?)

Only one month out of the year - August - failed to show a product which was shortlisted for inclusion in our roundup of the year's best. Put that down to the barny weather - too many people swimming to work to worry about getting kit out on time. To compensate, September and July featured five each. Overall it wasn't a bad year; not terrific but with some good and a few outstanding

**The Amiga might be**

**saying, as did Mark**

**Twain when his**

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**while he was still alive,**

**"Reports of my death**

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**exaggerated."**

products. The Amiga might be saying, as did Mark Twain when his obituary appeared while he was still alive, "Reports of my death have been somewhat exaggerated." And anyway, there appeared the product on which Commodore is betting its future. Yes, 1993 will be a year well worth remembering.



## STAR-STUDDLED

Before we begin opening gold envelopes and announcing the winners, here's the shortlist of products and the marks which they were awarded in *aii*.

### JANUARY

Amiga A4000	90%
Amiga A1200	90%
Vidi Amiga	95%
Morph Plus	90%

### FEBRUARY

Videomaster	95%
AMOS Pro	90%

### MARCH

Chessmaster 2100	95%
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### APRIL

G Lock	95%
Fractality	96%
GVP A530 Turbo	92%

### MAY/JUNE

Freewheel	n/a
ProWrite 3.3.1	83%
Directory Opus 4.0	85%





## COMPUTER OF THE YEAR



Only three candidates here and all featuring the AA chipset. January saw the official launch of both the A1200 and high-end A4000, though really both were on sale before. September's dying summer blistered at last when Commodore's CD32 finally reached our shelves.

Which is most worthy of the award? Well, we're sorry to say that it can't be the A4000. Although its technical specifications would make any technophile drool, its price puts it a little out of the reach of the average user. And, while we admire

it greatly, the A1200 can't win either, because the winner of this award can do everything it can do and use CD-ROM technology to boot.

Yes, the AMIGA CD32 is the clear victor in this category, largely because it's the first Commodore machine capable of everything claimed by all of the others put together. CDTV had a lot of potential; the A1200 is a powerful, cheap computer; the A4000 is a marvellous high-end platform; but the CD32 can do almost all they can and more. Wow. Buy one now.

## GRAPHICS PERIPHERAL OF THE YEAR

Videomaster, which was reviewed in February, gets an honourable mention here, as it allows sampling of images and sound simultaneously - and also offers editing and playback facilities to boot. This is incredible when you take the price into account - it's just £70. It won't grab colour without an RGB splitter, which you'll have to add yourself, but it is a great value box.

Vidi-Amiga lets you digitise pictures from video and combine them with sampled sound if required. Additionally, there is Take 2 software available, which allows complex animations to be constructed. Vidi-Amiga is a little outdated now, with more powerful and cheaper options on the market, but it is very easy to use and effective.

G Lock was described by Gary 'Gush-Gush' Fenton as "...certainly the best Genlock I've used for under £1000," which is worthy praise indeed. It beats the Grand barrier by a stonking £700 and at just £299, Gary said, it was "...worth its weight in cash." Apparently it won't allow true Chromakey, but has enough input and output ports to do almost everything else you'll ever need a Genlock for.

Rainbow 3 is a massively powerful graphics board. It's very definitely high-end, at about £1700. But that's worth paying if you're working with a lot of video and need 110MHz handling, an extra 4Mb of VRAM and up to 1600 x 1280 resolution. Awesome.

The winner here, though, is the bit of hardware which scored the lowest of this section of the awards. It's the ALFADATA ALFACOLOR HANDSCANNER. We were very



impressed by the performance of this unit when it was reviewed in November. We rather conservatively scored it at 85%, which takes into account the limited usefulness of a scanner just four inches wide. When used with Migraph's Colourburst software, it reproduced some cracking scans, which could then be used simply within DPaint and its ilk. Not cheap at £300, but certainly a cut above its competition.

## HARD DRIVE OF THE YEAR

Only two were nominated for this award and, strictly speaking, they don't have a great deal in common with one another. The Fujitsu M2624FA is a very competent hard disk. It's also a very LARGE hard disk, with about 500Mb of formatted storage space (that's nearly as

big as a CD). And the Fujitsu is a SCSI hard disk, which many people find superior to the Amiga's standard IDE.

However, the GVP A530 TURBO



## CAST

### JULY

Pagesetter 3	85%
Address It!	88%
Action Replay III	92%
Fujitsu M2624 FA Hard Disk	85%
ProPage 4.0	86%

### SEPTEMBER

One Stop Music Shop	90%
Sunrise AD516	90%
Amiga CD32	n/a
Rainbow 3	90%
X-Copy Pro	95%

### OCTOBER

AMax II Plus	90%
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### NOVEMBER

AlfaData AlfaColor Scanner	85%
PowerFonts	96%
Brilliance	90%

### DECEMBER

Cygnus Ed Professional V3.0	86%
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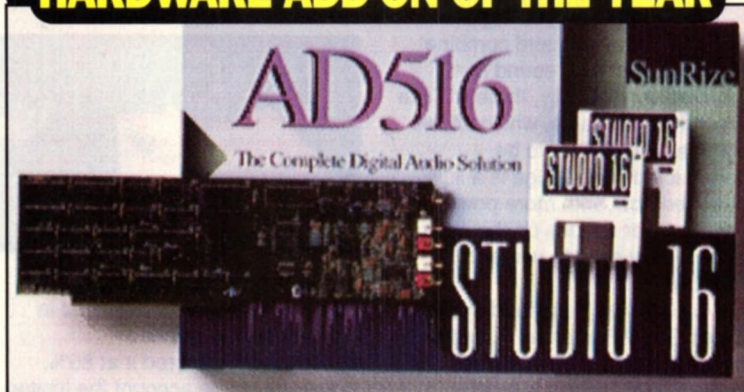
wins the accolade this time, largely because of its 680EC30 processor, the expansion option of up to eight megabytes of RAM and a range of disk sizes, from a low-average 42Mb to a whopping 213Mb. That processor accelerates the Amiga

faster than a Ferarri F40, to a G-force inducing 40MHz.

This effectively makes an A530 Turbo-equipped A500 faster than an A1200! It's a very well-made unit and, from £399-599, great value for money.



## HARDWARE ADD-ON OF THE YEAR



A real mixed bunch vying for the glory in this category. The only thing they have in common is that they need to be attached to the Amiga in some way.

AMax II Plus converts your Amiga into a Macintosh computer, which is very useful if you're working in the business world where the Amiga and Mac cross over regularly - such as the publishing business. In fact, Amiga magazine designing is one of the most useful areas to employ such a device, which is one of the reasons why Graham Baldock, designer of *ai*, gave it 90% after testing it. Cheaper and more convenient than buying yourself a Mac, for sure.

Action Replay is very handy if you want to alter games - or make backup copies of your originals for your own use (of course, what else would you do with them?). Other

than copying, you can grab pictures and enter Action Replay codes to grant yourself extra lives, time or energy for the games in which you get stuck. It's very tough to gain access to programs without a device like this and Action Replay is priced very reasonably, too.

But the winner here is the SunRize AD516. At £1400, it costs about the same as a 'D' reg Fiesta XR2, so to compete with that it needs to be good, and happily is. It is a very professional piece of sampling hardware with excellent software (Studio 16) to complement its powers. Its full stereo 16-bit sampling has been successfully used by the *ai* team for professional applications, which is the best test for any package which claims to be up to high-end standard.

## Editing Software of the year

A very mixed bunch here, with two word processors fighting it out with a text editor for the spoils.

John Walker reviewed both of the word processing packages in this year's roundup. ProWrite has been around since 1987 and this version, 3.3.1, is the best yet. It boasts a lot of the features which most people will want from a WP with one of the lowest pricetags: just £39.99, which, John Walker says, makes it superb value for money.

WordWorth 2.0 AGA is the first WP to allow A1200 or A4000 users to import AGA graphics into their documents. It's more than three times the price of ProWrite, but may be

worth it if you need high-quality images and text together. "For anyone contemplating word processing on an Amiga A1200 or A4000, it's almost an obligatory buy," says John.

The winner here is Cygnus Ed Professional V3.0. It lands somewhere between the two on price, at around £80, but it's useful for programmers as well as writers. Up to 40 documents or files may be opened for editing at once, multiple views of the same file may be open for cross-referencing and there are a number of very useful bonus features, including a full macro editor and almost unlimited UNDO commands. It also scored slightly higher than the WPs at 86%.

## DTP Package of the year

There are only two contenders for this award: Pagesetter 3 and ProPage 4.0.

Pagesetter 3 loses marks for not having enough fonts supplied with it. There is a font conversion program bundled with it, to allow imported fonts from the public domain and it offers most of the features you'll need to use in a DTP package. It's cheaper than ProPage 4.0 at £100, but this will become apparent in a direct comparison.

Still, reasonable value.

Let's get one thing clear: I love ProPage 4.0. I began using it to put together a poster for my local snooker club and just kept on finding excuses to boot it up. It's twice the price of Pagesetter 3, but the power of the program more than makes up for the extra cost. After climbing the learning curve, ProPage 4.0 is really easy to use and packed with features.

## File handler of the year

Again, only two choices here, namely X-Copy Professional and Directory Opus 4.0.

X-Copy Professional is a powerful backup facility. You can use it to fast format, copy to RAM and verify while copying, using up to four disk drives as source or target drives. It's quite easy to use, if a little unfriendly in its screen layout.

## DIRECTORY OPUS 4.0.

This file management program will speed up your file operations massively. Almost any type of file can be displayed, listened to or viewed, while the copying of files from drive to drive, formatting of disks in both AmigaDOS or PC format and deletion of unwanted files is simplicity itself. A wonderful program.



## GRAPHICS SOFTWARE OF THE YEAR

PowerFonts won glowing praise from Barry McCarthy in November. At 96% it must be about the most highly rated of this year's shortlisted software. In Barry's words, "If you're into 3D and ever need good quality

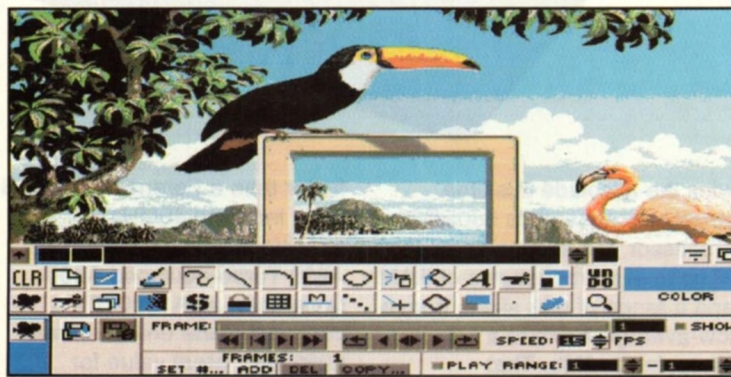
text objects then go and buy PowerFonts NOW." That says much more than we could ever do.

Fractality costs just £25 and, according to reviewer Martin Witton, is unbeatable value - also scoring

96%. There are a lot of graphics fans among *ai*'s reviewer population, it seems. If you want to relax in a pixelly sort of fashion, this is the best way (presumably while you wait for the picture to compute).

There's a close fight for the graphical glory this year between the eventual winner and Morph Plus. Morph Plus scored 95% from the well-satisfied Gary Fenton in January. And we at *ai* wouldn't be without the software, as we use it frequently for pictures and adding effects to articles.

The winner was chosen because it will be useful to a far wider audience than Morph Plus. It's Brilliance. While Brilliance is 'just' a paint package, like DPaint was 'only' a paint package, thousands of Amiga owners should find it entertaining and useful.





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**HP Deskjet 500 Colour £299.00**

**Lasers**

**Ricoh LP1200 £699.00**

Add £3 for Centronics cable and £7 for next working day courier delivery.



## Music Software of the year

Bars & Pipes Professional 2 is the only nominee for this award, so it wins by default. Don't mistake this as a cop-out: B&P2 is a worthy winner. It's earned itself a large following in the Amiga music field. Paul Overaa said in his November review, "...for creative recording there's not another Amiga sequencer that can touch it..." It's £299 but existing owners can upgrade for just £116.32 (nice round number).

## Programming Package of the year

Amos Professional wins hands down here, mainly because it brings the ability to program to so many Amiga users everywhere. Creating games is the most common reason for starting to program and Europress' program aims to make that as easy as possible for novice coders. It may be combined with a compiler to speed up the finished games and, if they're good enough, you can even sell them as titles in their own right afterwards. A lot of public domain games are written in AMOS and the program has contributed to the improvement of PD as a whole.

## General Utility of the year

Address It! could be the answer to all of your dreams. In the past I was connected with a company that had to mail as many as 1,000 prospective customers fairly regularly. We used a mailing database called Q&A and it was far from problem-free, cost many times more than Address It! and did the same job. If I needed to send people mail from a database system again, Address It! would be the database which to use.

## Printer of the year

There haven't been many reviewed, so the winner was in a class of its own. The Citizen Swift 240C wins this hands-down, with its high-quality colour printing abilities, the LCD readout which gives the user vital



## Most useless hardware of the year

This prestigious trophy goes to the Spectravideo Freewheel. While this looks very attractive and rather like a steering wheel should look, in practise it steered with me as well as a one-winged parrot that's been at a bottle of Captain Morgan rum. Maintaining any sort of control would be easier to do with John Major's PSBR and you're far better off abandoning the car and walking to your destination.

information, the wonderful quality of its LQ modes and the lightning-quick 240 characters per second in draft mode. Add to that the various fonts available and this printer starts looking blinding value, at just £359.

## Most Useless Software of the year

We haven't even reviewed this one, although it's been kicking around the office for a few weeks, waiting to be looked at. It's the Micromouse Church Contribution Recorder. It may be superb, it may stink, it may be the best programmed item of software in

history - but can you think of anything with less general usefulness? The big question is: will it draw a little steeple and fill it in with red, as donations mount up?

## Hardware Product of the year

Amiga CD32. Could there be really any competition? This machine is the future now - and in its little 5 inch disc it is the pioneer for the way the whole computer world will be going from 1994 on. With add-ons like the Microbotics board that will let you plug a keyboard and drive and the Full Motion Video cartridge

## Software Product of the year



For all the reasons listed above plus the fact that it's cheap and useful for everyone using an Amiga. And it's a considerable improvement on the already good previous versions. Well done, Inovatronics.

## Winner, Product of the Year award

If you were given the choice of all of them, which would you choose? We unanimously agreed that the Amiga CD32 offers something that no other product has: that touch of magic which comes from a massive, unexplored - as yet - potential. The Amiga CD32 is the biggest advance that has been made since the launch of the Amiga in 1985. It's Commodore's step into the future and it could be the launching pad for all of us too.

about to appear, the Amiga CD 32 is a launch platform for a new dimension of computers. And at its low price it could earn a Commodore the mass audience they need and deserve for this machine.

## The Best PD of the year

There are now more PD disks available than ever before, thanks mainly to a single program, AMOS. This long awaited programming language didn't disappoint and many people were now able to contribute programs, either excellent or indeed, as many were, complete go\*sh\*\*e.

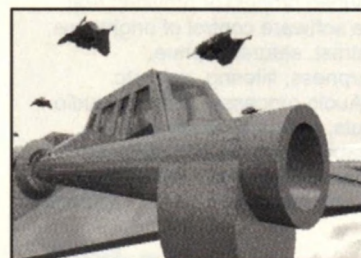
Talking of insults, the award for the worst piece of PD of the year has to go to any game programmed in SEUCK (Shoot 'Em Up Construction Kit). The graphics may well be excellent, but the programs suffered from seriously dire gameplay.

But enough of the worst: how about the best? I didn't review as many utilities last year as I would have liked, but we will be bringing you more this year. The Invoice/Order Manager which was reviewed in the July issue was very easy to use and it worked as well, giving excellent printed results. The winner, though, has to be a brilliant sound sampling program written in Amos, called SuperSoundIII. This contains hundreds of features, including many sound processing and editing options.

One of the best graphics disks has to be Revelations, which appeared in the August issue. This

contained some of the best PD artwork I have seen. Most of them used the Amiga's halfbrite mode to good effect and all looked stunning.

There were plenty of quality games available last year. A selection of the best include:- Numerix, Oblivion, Deluxe Pacman, Robouldix and Wibble Wobble Giddy. If you bought any of these you made a good choice.



For me though, the best game of 93 was Popeye, which was reviewed in the November issue. This game, which was originally famous on the C64, is a faithful conversion from the guys who successfully converted Donkey Kong. You control Popeye who has to collect a number of love hearts dropped by his sweetheart Olive Oil. Collect the

required amount and you go onto the next level. The game's only weakness is that there are just four levels.

This year was not one of the best years for music demos, but here in the **au**i office we have a few favorite sound modules, which we always play at full volume to relieve the stress after writing long articles. The top three are:- Roobarb+ Custard, The Trumpton Mix and Twenty Seconds To Comply. If you can get hold of any of these they will surely satisfy.

Finally we come to the best piece of PD from 1993. This comes from a certain Craig Collins, who in my opinion finally steals the crown from Tobias Richter in the animation department. His latest work, Last Stand On Hoth which is reviewed this issue, is the best animation I have seen on the Amiga so far. Most of Craig's anims contain few colours and no sound. This allows many more frames to be crammed into memory. If you like this animation, which will require at least 3 Megs of memory, then check out some of his other work which includes - APC Anim, Speed Limit and Dolphin Dreams.



# GAME OVER?



## WARNING!

Playing with your joystick can ruin your eyesight, stunt the growth of hair on the palms of your hands, drive you mad with frustration and damage your wealth.

*A special, completely biased, AUI New Year Intelligent User's Guide to the hyped-up, anti-social, money grabbing, addictive, ever-expanding, mind numbing but fun world of computer entertainment.*

*How it began . . . Best of '93 . . . Special Effects . . . Nothing good comes easy . . . Licensed to print money . . . 32 Bits Elite, Game of the Year . . . plus the latest releases.*



The Spectrum made Sinclair oodles of cash until it was all blown on a silly project called the C5 and another flop the Sinclair QL.



## They came from inner space

**David Taylor blatantly ignores facts that don't suit him as he stumbles down memory lane holding a cracked and distorting mirror to the video game past.**

**I**t didn't all begin with Space Invaders, I'm afraid. The first (successful) game was a Pong, a sort of bat and ball game, but I never liked it so I'm going to pretend it didn't happen.

A few years after this electronic historical mistake (OK, it was important, but I still refuse to like it), Space Invaders entered the arcades, except that there weren't really any arcades then because there weren't any video games to go in them. In my case, Space Invaders entered my local garage. Simplicity itself, green sprites with a colour banding put on (later) achieved wonderfully by a coloured piece of plastic stuck on the screen! Most people's first experience at being able to shoot things.

Then came Phoenix, Galaxians (and you can find THE best clone we've seen of this excellent game on this month's Superdisk - lucky people) and Gorf. Phoenix introduced the end of level guardian in the shape of a

Asteroids appeared as did Defender, two whole new directions for the shoot 'em up (literally).

### blob

Using artistic licence to skip and jump about as we please, we arrive at the next major change in electronic games - Pacman. Racing around a maze, chased by ghosts and looking like a yellow blob, Pacman might have been

**The wire graphics allowed**

**you to "Use the Force"**

**to blow up the Death**

**Star. Brilliant stuff.**

the first game to include power-ups, in shape of Powerpills that allowed you to chase the ghosts for a change. This, however, is a source of a dispute in the AUI office as opinion is divided between which game counts as the first for power-ups, but Pacman seems to have the most convincing argument.

Frogger was another game that captivated the gullible public and it became obvious that a lot of money could be made in the industry. People set about doing this and did it rather well. Then a certain Clive Sinclair released an utterly useless home computer kit to let you build a ZX80. I knew somebody who did this and I

refuse to let them forget it. Luckily, the ZX Spectrum thereafter appeared and the home computer market really took off. This is a UK view, of course. It already had taken off elsewhere especially in the USA with the Vic 20 sometime before.

### sequels

The Space Invader clones or conversions came along and all the arcade games started to appear at home. So did a strange character called Horace who went and did just about everything. Horace introduced the idea of sequels and therefore brand loyalty - what a debt we all owe to him!

Sampled speech arrived in the arcades on the absolutely superb Star Wars. The wire graphics allowed you to "Use the Force" to blow up the Death Star. Brilliant stuff.

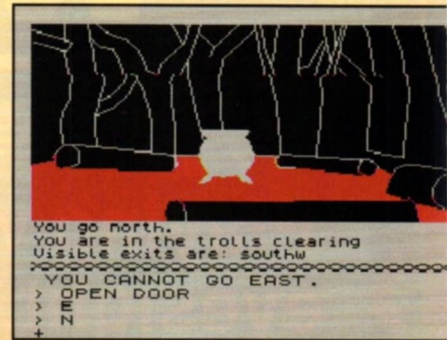
Then everything just went downhill. No, it didn't. The Hobbit was one of the most successful text adventures and even had graphics - wow! To my mind I'd still rather play this game than the awful Lord of the Rings game which someone had the indecency recently to inflict upon us - a disappointment to all Tolkien fans.

### battle

The Commodore 64 came along, people gasped at the graphics and Commodore really got into the market

that they've proved themselves to be the best in. When the Amiga arrived, or more importantly the A500, computer games had established themselves as a legitimate way to waste a great deal of your life. The infamous battle with the Atari ST raged until the Amiga was acknowledged as the superior (and today are we not awaiting the result of the rematch between the inferior Sega and Nintendo machines against the CD 32? History does seem to repeat itself).

To jump elsewhere, a quick mention of THE computer game is in order - Elite. This space simulation invaded the home of most computer owners, became a phenomenon and



The trolls scene which still pulls at my heart strings.

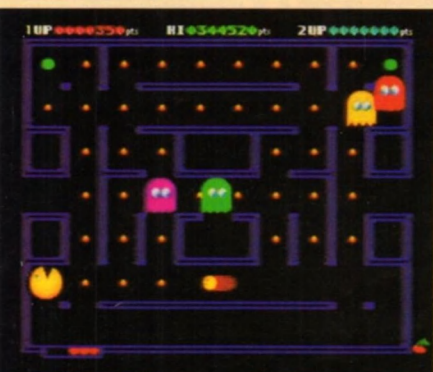
got its own fan club. Will the sequel do the same?

In the Amiga's lengthy history, in electronic terms anyway, there have been more games than anyone could possibly remember. Most of the ones mentioned earlier are now available in the Public Domain, under obvious pseudonyms.

Commercially speaking the 'classics' for Amiga users are, in no order except the one in which they popped into my head, Xenon, Rainbow Islands, Speedball 2, The Secret of Monkey Island, R-Type 2, Dungeon Master, Flashback, etc, etc, etc... If haven't played any of these, who cut off your limbs to stop you?

And ten years from now what will we think of those then miracles of the video game art? Or of ourselves? **a**

Dive bombers eat my plasma!



He's got no neck but a big belly.

mother ship you encountered every few levels, whilst Galaxians had the innovation of enemies which dive bombed you.

By this time, the most major effect of video games was obvious - you shovelled all your money into the games' coin slots which left you broke.



**O**ver recent years there has seemingly been a dramatic rise in the violence presented to us, not only in films and video games, but perhaps more importantly in the reporting of it. Whether or not there is actually more violence in the world, this has led, yet again, to the argument of art imitating life or rather vice versa. Computer games is not first medium to be accused of threatening our society - books, painting, cinema, radio and television have all faced the same charge.

There is no point denying that computer games have become progressively more violent or at least their graphic quality now makes it look more realistic. But there is also no point denying that children are inherently violent themselves.

The 'evidence' that computer games makes them so is, to say the least, flimsy. Nor is it the case that children have forgotten how to play, simply because their mode of play has shifted from the traditional games to the ones now offered by technology.

Iona Opie, a leading authority in children's games, said "Adults should have more faith in children. Every human being needs to play and children are not going to suddenly stop. Organised play is a very sad concept."

"Play" in animals is often symbolic of violence and it is mainly used to inculcate violent offensive or defensive actions in relatively harmless manner. Should it be considered different or more dangerous for humans?

## computerholics

Dr Shotton, a psychologist from Nottingham University and author of

# SPECIAL

## **Are Computer games destroying the fabric of our society? Or are they just a good excuse for media scaremongery?** **David Taylor investigates.**

"Computer Addiction? The Study of Computer Dependency," concluded from her studies that computerholics "were all highly intelligent, motivated, achieving people." Now, that's a nice compliment to most of us, isn't it?

For those who wish to slate video games there seem to be two directions from which to attack. The simplistic "Computer games make you violent and prepared to do anything to get the latest game" argument and the "Computer games cause epilepsy and are therefore a medical danger" argument. Both are somewhat lacking in scientific evidence.

Vous (Man Bites Dog), a black comedy, questioned why or how we can find violence entertaining. Undeniably we do though; Freud commented that the most enjoyable thing was to see your friend fall off a roof! (The German word, for the linguists among you, is "Schadefreude" roughly meaning the joy you feel, slightly shamefacedly, when your mate slips on a banana skin.)

All of this is still a far cry, however, from proving that video games incite violence. I expect that just as the arguments against other forms of entertainment died away, so

Normal on the outside...

becoming more real and hence the violence more believable. It is one thing to say that we can distinguish between reality and fantasy, but how easy will it be when electronic reality, virtual reality, becomes ostensibly as real as life? Do simulations of violence stop being simulations when they are as apparently real as the reality around us or will we be able to accept that these are still no more than an opportunity to allow our more basic instincts to be freed and our darker fantasies to be fulfilled in safety and without danger to others?

As for medical concerns, video games can bring on epileptic attacks because of the update rate of games. However, this is also the case for people travelling in the car with the sun roof open. Both are caused by the strobe effect - quick and continuous flashes of light. These do not cause epilepsy, but bring on attacks in those prone to them. This can mean that video games are the first time that people realise that they suffer from the condition. Caution, therefore, is required.

Does this article seem somewhat biased? It is. I have played video games since they appeared and I can't see that they have caused any problems to myself. I am a normal, balanced human being, who happens to enjoy excessive and gratuitous violence, the more vicious and bloodthirsty the better. There's nothing wrong with me I tell you. And so will my Mum.. Stop!

Get off me. Leave me alone or I'll zapp all of you...

We apologize for any inconvenience, Mr David ("I am a Lemming") Taylor has been removed for reprogramming. When playing computer games he forgets to take his tablets and occasionally formats himself directly into the hard drive... **a**



Are computer games creating a generation of monstrosities?

# EFFECTS

There comes a point when you have to acknowledge that children do have the ability to differentiate between fantasy and reality and that their violent games are just that - games.

A recent Belgium film C'est Arrivé Près de Chez

will be the one against computer entertainment. Society fears the new, but learns to accept it.

## realism

The problem with video games and one which I accept is that they are

...but does a monster lurk inside?



**Another year in Amigaland wanes and the software houses are swatting the bugs to push their last releases out for the festive season - an ideal opportunity, David Taylor and Ashley Cotter-Cairns thought, to look at the releases which have weathered the year well (in other words, we still like playing them).**



The new generation of RPG with this superb game.

## Blade of Destiny: Realms of Arkania

This is the RPG of the year. A fine effort from US Gold. Despite the disk swapping that seems inherent in this type of game, the options and entertainment offered are extensive to say the least. It hardly wins on originality - beat the orc bad guys, etc - but the graphics and sound top the gameplay off to provide a great and playable game.

## Combat Air Patrol

Although it's only released this month, Combat Air Patrol is the standard setter for these types of games. The graphics are exceptional and the amount of gameplay you can indulge in is

wonderful. The Gulf War is the theatre (OK, that's nearly as good a euphemism as the term "killed by friendly fire") at your command. Not only do you jump into the cockpit



You've got the whole world in your hands...

but also take the role of the commander and plan and plot the method and means to achieve your goal, whether you decide that is to liberate Kuwait or eradicate Iraq. One of Psygnosis's best releases for quite a while.

## Disposable Hero

There is a reason for including this game. It's good. It is a straight shoot 'em up, almost a clone of R-Type 2. Why I liked so much was because it was the best example all



We come in peace, shoot to kill. year of a polished blast 'em up. The game was beautifully presented, with excellent graphics and great

# THE BEST

# 19

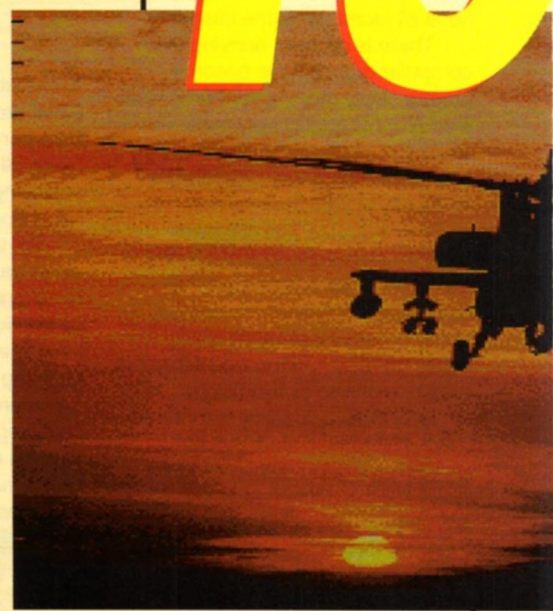
## Desert Strike

OK, so it doesn't score highly on taste perhaps, although a bit of sick humour doesn't upset me too much. Desert Strike is a shoot 'em up with a touch of originality. You can roam free and take yourself wherever you and your gunhappy co-pilot want, destroying bases and completing missions in your own sweet way.

I like the way that MIAs could be accidentally killed with your friendly fire (I did say it didn't score on taste). Unfortunately there isn't a chance to 'power up' and you can only pick up ammo for your preset weaponry. Why this element of realism was introduced in a game that ignores all others, I never understood.

The scrolling is done well and the control method is easy to get to grips with. Violence abounds and the level of difficulty is expertly judged. The only other complaint I have is that you can destroy everything on the map except your own aircraft carrier. Maybe it's only me that wanted to, but I doubt it.

All in all, a fine blast 'em up to soothe the tension.



Very moody as you hang out in your gunship.

# Dune 2

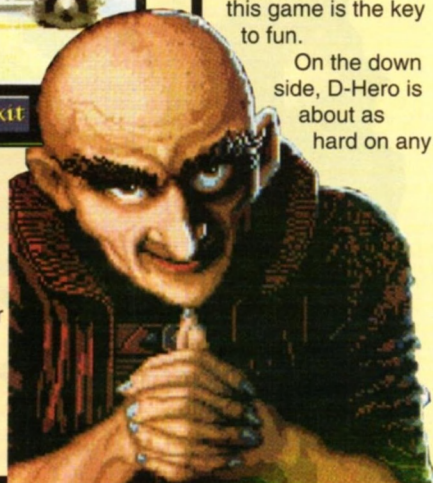
I liked the original Dune, but the problem was that it was just too easy.

Dune 2 gives you some of the knottiest problems since a whirlwind blew through the world knitting convention. You have to play one of the three houses of Dune's unique ethos, with the ultimate goal of conquering the planet Arrakis. But the short-term problem of staying alive is the biggest stumbling block.

It's a bit anti-social, being incredibly brilliant to play on your own but pretty boring to watch for those lacking patience. The thoroughly involving gameplay will keep you up cursing at night, praying that your scientists come up with some nifty new piece of hardware to chuck at the enemy and wondering what the Emperor has in store for you at his palace... a clue: it's long and pointy. The best strategy game of the year, possibly ever.

(Let's face it both of us agree, if you have an "other 'arf" then Dune 2 is likely to annoy them due to the time you want to spend playing it.)

Mad as a hatter this bloke, but what a game.



sound. To fully appreciate it, you need the Amiga linked to an amplifier and the volume very high. If it's too high, ear protectors may be in order, but ear splitting sound on this game is the key to fun.

On the down side, D-Hero is about as hard on any



# GAMES OF

# 93

## Flashback



Conrad is ready for a shoot out with the pesky aliens set to take over the world.

This game was the only real contender with Elite 2 for game of the year. The first game I know of to use rotoscoping (the technique used in the film industry where actors are filmed doing certain moves and then drawn over to provide lifelike animation). Thus, Conrad, hero of Flashback, moves with extreme panache, whips out his weapon as quick as James Bond and shoots with style. Faster than Delphine's earlier Another World, which has just been released on budget, Flashback is relatively simple, but worth getting to enjoy the gameplay and graphics. The sampled gunshots are rather excellent too.

## The Patrician

I really hesitated here. It's a strange choice, because The Patrician has no outstanding individual characteristic. The graphics are good and the music is annoying, but amusing. However, I did play this game until I completed it and

enjoyed the time it took and few games can claim that. Set in the fourteenth century, you start as a humble trader with aspirations to become the Alderman of the mayors and with little care how you achieve it. Bribe your way there, have covert links with the pirates



What a pity! There's no time for sympathy in this game, unless it pays, of course.

(causing the opposition a little problem) and make a lot of money. The Patrician is fun. I stand by my opinion.

## Pinball Fantasies CD Edition

Ah. Pinball. Many a pound coin has left my pocket and chunked into the bowels of the Addams Family pinball at my local. So what I needed was a solution to this indulgence.

And here it is. Pinball Fantasies CD Edition is the ultimate pinball game available today. Its 256 colour tables are joyous to behold. The sound (while not fully upgraded to CD standard) is as great as ever and



Party on, dudes. Pinball shall rule the world!

the playability... well, I'll just say that this IS pinball, which means that you'll love it if you love it, or hate it if you don't. (Hooray! Every reviewer's favorite phrase makes its last appearance for the year!)

But if, like myself, you are passionate about it, wonderful things could happen between you and your CD32. Say no more.

## Premier Manager 2



Premier Manager 2 is a real improvement over the first.

Forget Goal!. Let's just admit that football sims don't work very well. A football management sim is possible

though and this one has everything. It's very in-depth and leaves you all the decisions from the team selection to the ground improvements. This is a good game, let down only by the dated graphics and average sound. The gameplay though is second to none in this league.

## Shadow of the Beast 3

The best of the bunch. Where the second instalment was accused of being too difficult, this perhaps errs on the easy side. The graphics and music are of the same high standard and I enjoy this game. There's not much more to say. There can be few who haven't come across one of the three Beast games so everyone knows what to expect.

## Syndicate

Bullfrog have done some great games and this is definitely one of them. You control a set of agents who have been "persuaded" to work for your syndicate with the ultimate goal of conquering the world. An A1200 is the best speed machine for this game and it allows you to really take advantage of the weaponry available. The best thing about this game is the liberal guidelines you have. If you're in the game area



Excuse me, sir, but is that a flame thrower in your pocket?

trying to complete a mission, but there are just too many civilians in your way, you can simply massacre them and who cares? Nobody. A policeman might, but if he causes a fuss then flame thrower him. Nobody is above your sort of law. Except you.

## Walker

I am including this for one reason only - the amount of lemmingesque sprites you can blow away with your



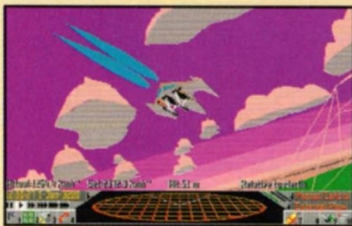
These boots were made for walking.

Walker (which looks surprisingly like the sprite from The Killing Game Show, which looked surprisingly like the machine in The Star Wars films). It's not a classic game, but a very relaxing one if you want a good blast. Not subtle, but fun. **a**

## GAME OF THE YEAR '93 Elite 2

Again you can read the full review of this game in this issue, but there was simply no way Elite 2: Frontier could fail to get this accolade. Admittedly that after the wait, we'd expected all the bugs to be ironed out. However, Elite 2 is still the best buy for every Amiga user this year. We doubt it will take the world in the same way that the original did - after all, there are just too many releases nowadays to allow that phenomenon to be repeated - but it is wonderful.

Much harder than the first and infinitely more detailed, Elite 2 takes advantage of whatever platform you use. The graphics are stunning and the choice of things



This game has more scope than Star Trek has had reruns on the BBC.

to do makes my mouth water. The bugs should have been corrected before release and the idea of data disks is nice, but may taint the homaged image of Elite. Still, Frontier will make everyone concerned with its production pots of cash.



**I**t's almost always in the bath. My wife says it's more frequent in bed at night, but no: when the idea of the century hits me, there's never chance of finding a pen. Our sodden bathmat tells its own story. Concepts for games can strike anytime and the results can be spectacular. Many people have ideas, but only a determined and creative person can convert this into an end product.

The way games are created is going to change. The burden of games design mostly rests on the shoulders of programmers. Not content with asking them to meet ever-tighter deadlines, software companies have expected them to be creative, too.

### design

It's like asking a mechanic to design a sports car; you just wouldn't. Witness the umpteen similar platform games flooding the market if you need proof. Most were designed by their builders.

By 1997 or so, games designers will probably be the highest-paid members of the software creation machine. Original games sell and sell: the success of Populous, Sim City, Dungeon Master, Elite, or Dune II illustrate that argument; so original thinking is rare, maybe priceless.

Once an idea is born, the designer fleshes it out. Maybe he'll work with an artist who can help to sell his idea. Between them, they build what's called a storyboard (a series of images illustrating every aspect of the game) and here the selling process begins.

### refusals

Often the team will need to approach several software houses before one shows interest. Classic games have been refused, which happens to famous authors too; creative minds suffer alike! (P.G. Wodehouse had his first book refused by 26 publishers!)

Having found a company to back it, the designer usually works closely with the development team, which the company usually supplies.

Independant teams may begin development and then approach a software house to sell publishing rights. This happened with Lemmings from DMA Design; and Wizball from Sensible Software, also creators Sensible Soccer. Many become thriving businesses, like Bullfrog, which won many awards for Populous.

Next comes the initial development meeting. Vivid Image Software (creators of First Samurai)



As unbelievable as it seems this is how the sprites are stored.

# Nothing Good Ever Comes Easy

**Surely bringing a mere  
computer game to market  
can't be all that hard... Ashley  
Cotter-Cairns discovers how a  
brainwave becomes a rave  
game.**

## I WOULDN'T WANT TO BE A FREELANCE AGAIN

Millennium's Toby Simpson, author of CD32-bundled Diggers, has been a freelance programmer, but now works in-house for the Cambridge-based company. He wouldn't go back.

"There's a lot of stress when you're freelance; the money is very infrequent, which makes obtaining loans or a mortgage very difficult. Working in-house means that you get a regular salary, your equipment is paid for and you have the expertise of others around you to draw on.

"Writing a computer game is immensely satisfying. You're effectively creating something from nothing and seeing that product go on sale is incredible. Reviews can be wonderful when they're good, but depressing when they're not. There's a lot of stress at the end of a project, when a bug may turn up and you think 'I've only got a few weeks to go and this is going to take a month to find.' But the rewards make the stress worthwhile."



have a cartoon, which shows a stork swallowing a frog. The frog's just managed to get its front legs out to throttle the stork. This is their interpretation of what happens when designers and programmers meet!

The designer wants his game to be the most perfect game ever. The programmer is very down-to-earth about what he and his machine are capable of. Usually they go too far, the designer refusing to cut details, the programmer adamant that the Amiga CANNOT manage pixel scrolling...

So a referee, in the shape of project manager, works to make them co-operate. He's also responsible for project deadlines, arranging progress meetings and keeping the peace.

Artists provide a bit of light relief, as they are a target which both designers and programmers can attack. They can be equally pig-headed about what's possible. But their input is essential; if a programmer can't come up with original game concept, imagine what he'd do if faced with designing graphics, like the Diggers sprites shown here. It happened in the 'good old days' of the Spectrum but, thankfully, no more.

### round three

Is this all creative posturing? Not really; although meetings can turn into mental boxing matches, most work is done behind the scenes. The designer works on the next section of the game, the artist makes changes to his designs and the programmer tries to pull everything together.

As deadlines loom, the meetings get more regular, more coffee is drunk and midnight oil is poured out in barrels. It's here that the project manager earns his money, because any slip-ups now could spell disaster for the game's future.

Senior members of the software house often join later meetings. Timing is crucial, especially for games targeted at seasons or events (like sports games, which are often tied to infrequent tournaments, such as the World Cup or Winter Olympics).

More faces appear. Playtesters get copies of latest versions and begin checking for bugs. By now, the designer has probably done his work and the artist is almost safe to relax. Not so the programmer, on whose shoulders the future of the title rests.

Mistakes are found, corrected, rechecked. Graphical glitches are repaired, the musician adds the sound, everything is checked and rechecked. Once the project manager is happy, he refers the game to the company, who may have changes to make... but if not, everyone can breathe a sigh of utter relief and crack open the champagne. Now it's up to the marketing men to ensure the success of the game.

Nothing good ever comes easy. **a**



**A**sh: So, what about a title then?

**Dave:** Dunno. How about "Marketing a Game"?

**Ash:** Yawn. Yawn. Yawn. What about "How They Sell Units to You Nits"?

**Dave:** That is such an awful pun that I refuse to be associated with it. I was thinking of something with the word "Mortal" in it, so we could tie it in with the most hyped game of the year - Mortal Kombat. I mean, did you see the TV ad? They seem to think that throwing enough snatches of speeded up gameplay in and showing loads of kids shouting "Mortal Kombat" will make people buy a game. Honestly!

**Ash:** Blow me if it didn't work! You've got to hand it to Acclaim, they could market cowpats as pizzas and steal market share from the frozen pizza people - which, in a way, they did.

**Dave:** Well, it wasn't as if they weren't in a saturated market, what with the tripe hype around the other stupid and equally dire fighting game, Streetfighter 2. How on earth someone managed to make a sequel beat me. Still, it was such a hit in the arcades that a conversion was certain success. They just had to convince those few unbelievers that this was the game they needed to have any street cred.

**Ash:** In my book, you can deduct street cred for owning either game. If people tried products before they bought, then a lot of software companies would try a lot harder to make their games as good as their marketing.

**Dave:** Yeah, but the point is, it doesn't matter whether the game is cool or not. Nowadays it's just a case of telling people that they're cool and that if they don't think so, then they're wrong. Why do you think so many reviewers daren't slate Mortal Kombat?

**Ash:** What annoys me is that there will be thousands of people who will

**If people tried products**

**before they bought, then**

**a lot of software**

**companies would try a**

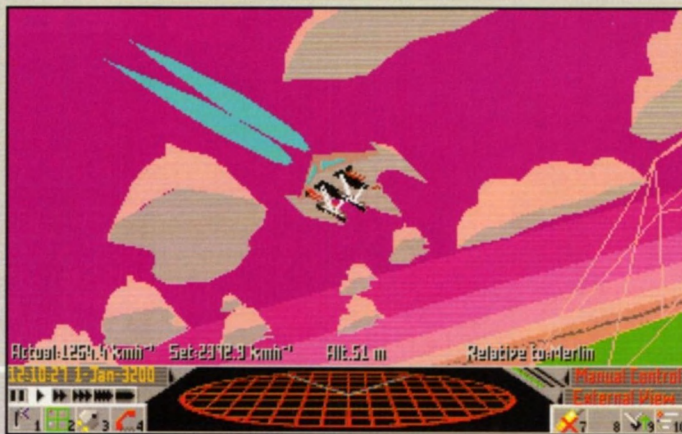
**lot harder.**

buy Mortal Kombat and never buy another game again, because it's so shallow and, in my opinion, poor value for money. That's customers probably lost to the marketplace for any future hit games, some of which may actually display imagination and originality.

**Dave:** It's silly, isn't it? It has been

shown time and time again that originality and only a little marketing can beat the most hyped game. Take Lemmings for instance. I didn't like it, but I can see why some people were hooked. It had little advertising compared to its sequel, but wow, did it sell! The same goes for Elite 2. I know how that is going to do, whether it's marketed well or not. The quality wins through and after all, that's money in the company's pockets.

**Ash:** Elite 2 would sell if Gametek ran ads saying "Don't buy it. It's crap." That's because people have been gagging for it since the first Elite appeared ten years ago. Those people have been around for all that time and won't have been impressed by the hype surrounding "Mega-



Elite 2 - so good that no marketing could harm it.

games". They've seen it all before (mostly from Ocean) and have had their fingers burnt in the past. It's the newcomers to the scene that I feel sorry for.

**Dave:** Mind you, to be fair to Ocean, their latest ad for Jurassic Park really caught me. "When the Streets ain't tough enough, go play in the Park." Brilliant. A little dig at Streetfighter in there and quite amusing too. Still, doesn't mean the game's any good. It's a pity that film licenses can't be banned. They are an excuse for loads of hype about a nonexistent game.

**Ash:** I disagree. The whole point about film licenses is that they help to hype themselves. The film is in front of everybody for months and that sells games. I agree that they should be banned if companies won't commit themselves to make a good job of it, because a film's plot restricts the imagination that can be put into a game design. Plus, the money spent on obtaining the license means less money to be spent on developing a good product. A recipe for disaster, at least for the consumers.

**With the video game market in the UK hitting the £700 million a year**

**mark, top selling games are**

**megabusiness. But is a game**

**worth megabucks worth playing?**

**David Taylor and Ashley**

**Cotter-Cairns air their prejudices**

**about the latest obscene four**

**letter word - hype.**

**Dave:** Personally, I just think certain people in the industry should commit themselves! (Laughter)

**Ash:** Very good. Seriously, look at the success of Populous. Bullfrog made its name from one product. No hype. Just quality. Not only that, every game

from them since has been quality too. QED.

**Dave:** Quod est demonstrandum (I did Latin, you know!) What's been shown? That an original, good game will sell and sell. Yes and it

**Ash:** Advertising makes sense if the product behind the advert is worth selling. What happened to the old values of offering customers fair return for their pounds? Has money blinded companies into thinking that a reputation could survive huge sales of a dire game? US Gold thought that back in 1986 with World Cup Carnival. It ruined all of the hard work they'd put in to make their name respected here.

**Dave:** The problem is that the electronic entertainment market has grown so huge that literally millions of pounds can be at stake. Companies can't afford to allow even a poor game to flop, so they ram it down our throats via advertising. Of course, there are some superb games. The ones rounded up from this year are simply

excellent, but these are outnumbered, to say the least, by dross.

**Ash:** Which makes our job even more important, Dave. Giving an honest analysis and verdict on a game. What it is to have power!

**Dave:** Too right, Ash. I think this would make a great article, but

we still haven't decided what to call it? We could do it like a conversation and call it Head to Head.

**Ash:** How about "Licensed to Print Money"?

**Dave:** OK. I like it, but I don't suppose the Ed will let it through. **a**



Who cares if it's tripe, use loads of hype!

deserves to, but why do companies continue to hype then? Fear is my guess. They're afraid that other companies will beat them by outadvertising them. Mortal Kombat did show that advertising muscle can force poor quality on the market.



# AFTER SEGA AMIGA BRING Y



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great new games. Twice as fast and twice as powerful as any other games machine you can buy. Game over. **AMIGA CD<sup>32</sup>** HAVE YOU GOT WHAT IT TAKES?



# The 32 Bit Column

## JAMES POND 2

### ROBOCOD

#### MILLENNIUM

**£25.99/29.99 CD**

Pond is back with a vengeance. His mission: to save the North Pole HQ of Santa from Dr Maybe's evil penguin bombs. Will he succeed?

More to the point, has Millennium succeeded in making the 32-bit versions special enough? Indeed it has. The colour schemes are beautifully subtle, Pond's animated to a fantastic

seems a bit steep for just a few tunes, but platform freaks will lap this one up. Class.

### RATING

<b>A1200</b>	<b>84%</b>
<b>CD32</b>	<b>88%</b>

## ALIEN BREED 2 AGA

### TEAM 17

**£25.99/CD version**

The long-awaited sequel to the game which made Team 17's name is here. Worth the wait? Yes, but hope the friend you played with last

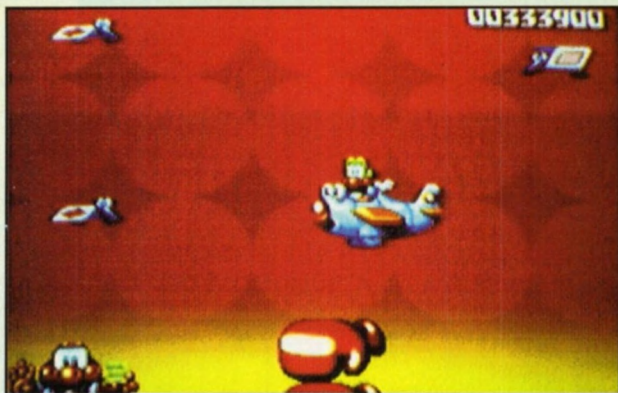
# A Breed Apart...

The powerhouse processors and custom chips in the A1200 and CD32 may have the capability to do great things to the games business, but have the software houses delivered? Ashley Cotter-Cairns finds out.

When Commodore's 32-bit machines were both put on sale at a mere £299, games players must have been drooling. On paper, the specifications seem just too tempting: 256 (usable) colours on-screen, 2Mb of RAM, 32-bit processor... all the signs were there that the latest range of Amigas would be the best (so far).

But a platform is only as good as the games available for it. It soon became clear that not a lot of 32-bit Amiga games were appearing. Was the new Amiga doomed to be dragged down by 1.5 million of its younger sisters?

Happily, I can report that this has not happened. The A1200 will take some time to overtake the 16-bit A500/A600 alternative, but once it does there'll be no stopping it. And the CD32 is Commodore's dream machine, for the time being at least. Software support, while still slow for both machines, is arriving. So here are the best of the 32 bit games around.



Good God! A hero on a massive scale.

standard and the backgrounds are WEIRD. Sound is merely great on A1200, but the CD32 version wallows in 16-bit soundtracks (CD quality to you, guv), which really make a lot of difference.

There is a question mark over the price of the CD version, which

time will have lost his patience, because AB2 plays better as a solo mission.

It's a lot tougher than the first game, with more meanies to beset you at every twist and zigzag of the alien world you have to cleanse. They are more intelligent and

tougher to kill than their ancestors. AGA graphics don't make a world of difference, because the colour scheme is made intentionally dark and mysterious.

It's a shoot-em-up which plays better with one, at least initially, as the other player either gets trapped



We shall blast until no alien breathes Alpha-Five air.

or ends up trapping you on what is a very tough level one indeed. It's very difficult to survive with both players intact for that very reason and, as each character is larger than in the first AB game, they are more susceptible to attack.

The usual extra weapons and powers are complemented by a choice of characters to enjoy, there are some amazing intro screens and between-level pictures and the violence is very compulsive. It's a red-letter day when a game like this arrives.

### RATING

<b>A1200</b>	<b>91%</b>
--------------	------------

## OVERKILL

### MINDSCAPE

**£25.99/CD version**

Blast! That's the plot over with. This is an unashamed clone of a classic zapper, Defender. There are a few new features: the choice of planets between levels, the crystals which must be destroyed, your troops parachuting in from a support plane.



Not a great deal of plot to deal with in this game.

But mostly it's fly left or right, fill the screen with shrapnel and hang onto your pants time. Some of the sampled sounds are definitely dodgy, but the scrolly backgrounds and colourful sprites make Overkill a birthday for the optical nerve.

### RATING

<b>A1200</b>	<b>80%</b>
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## SLEEPWALKER

### OCEAN

**£25.99/CD version**

The Comic Relief computer game was a superb concept, not least because it was raising money for charity. And still is, of course, because Ocean is donating some of its profits to the charity for each unit sold.

You're Ralph the dog and have to save your master from an untimely demise - from nothing more sinister than the everyday hazards of city life. But the problem is that he's fast asleep, snoring and walking at a steady pace, straight towards open manholes, water and one thousand and one other dangers.

The improved graphics are disappointingly dull, but then again it's set in the middle of the night, so that gives Ocean an excuse. But I say, if the colours are there, they should be used to brighten things up.

Very playable, full of humour and, if you've been feeling guilty about trashing things, your conscience may be salved twice over.

### RATING

<b>A1200</b>	<b>84%</b>
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## DIGGERS

### MILLENNIUM

**£29.99/CD version bundled with CD32**

Commodore bundled Diggers CD with the machine, which should tell you something about it. OK, admittedly it was the first game finished in time. But nevertheless it is a very involving strategy game.

Your task is to win the annual Zarg mining competition. Zarg is the planet, not the commodity and the stakes are high: win the contest and win the mining rights for the next year. Ore is extracted by your team of five miners, which can be any one of four races and must be converted into credits back at base, where it can also be spent on extra machinery to aid your mission.

The miners have to be watched, as many are intelligent and will grow bored, then wander off in search of excitement (which is Zargese for "extreme danger"). This gives you a role of God and babysitter, keeping tabs on five independent chaps let loose in a sprawling world.



Welcome to a Digger's boudoir.

It seems that most 32-bit games are destined to be dark and mysterious: Diggers, being set underground, continues the trend. But the CD version features excellent CD soundtracks, which really set it apart from the floppy A1200 game. Recommended.

### RATING

<b>A1200</b>	<b>85%</b>
<b>CD32</b>	<b>91%</b>



# FRONTIER ELITE 2

KONAMI/GAMETEK 1 Meg £29.99

**T**here is a certain amount of awe surrounding Elite 2. It's not really that surprising considering the fact that the original Elite revolutionised the gaming world. It's rare, in fact unique, that such a sweeping statement can be made in the computer entertainment industry. However, the fact is that if you mention the game Elite to anyone in the industry and they don't immediately start raving, then they need sacking.

Elite (for those people who need sacking) was the sensational space trading game that allowed you to roam through the universe fighting and doing 'your business'. Elite 2 finally, after years in development, fulfills much of what was promised in the original game.

The original game offered two thousand worlds for you to visit but the sequel has an astounding one hundred thousand. Each has its own economy and political structure. The game offers missions from simple parcel delivery to assassinations on top of the standard trade.

You can choose to trade in legal goods, or opt for the far more lucrative business of smuggling. The knack here is to find the system where certain goods, such as slaves or narcotics, are legal and then try to sneak them into a system where they are illegal and then sell them on the black market. Of course, you have to beware the customs officials and police who pose as traders to capture those involved in this illegal commerce.

The military also offer missions and as you progress in their eyes and in 'Elite' rating (how good you are in battle), you will be offered more trusting missions.

The universe in Frontier is split into factions: the Empire, the Federation and Independent. You can work for both Empire and Federation and gain a rating from both. They seem to ignore whether or not you have a legal status and nobody really cares as long as you



A more standard space station - it really is a good game, isn't it?



A spaceport for you to admire (or shoot at).



The map allows you to visit any satellite.

pay your fines.

This raises the point of gameplay. The best way to win in battle is to have a large ship, with lots of shields, use the autopilot to lock on and then ram the enemy.

Wow! Skill or what? If you don't do this then the likelihood is that the enemy will do it and it leads to the same outcome. This means that the fighting is a great deal less skillful than in the original.

Still, one fun thing to do is to leave a spaceport and drop a mine outside the entrance. The police will chase you for discharging a weapon illegally and hit the mine, thereafter exploding on each other's debris. Sit back and watch the destruction!

I have yet to manage to blow up a space station and don't think that it is possible. Having tried with an enormous amount of firepower, they seem to take the impact, but survive innumerable missiles and lasers. All they do is bill you for 'piracy and murder'. Pity.

The graphics in Elite 2 are brilliant and the game allows you to choose the level of detail with your computer can deal, meaning that a more powerful computer can permit more detailed graphics without interfering with the speed of the game.

The sound, despite the game being held back for changes, is quite poor. Luckily, you don't have to suffer this throughout the game.

Elite 2 is certainly the best game of the year. It was always going to be. Nothing could have possibly stopped it. But.....

after the tremendous wait and hype, I expected more. Blasphemy, some will cry. No. This game could have been the best game ever. It has a pedigree and a standard to live up to. I do not expect a game from this stable to have any bugs. Elite 2 has a couple. There are times when you log onto the bulletin board (to find jobs and illegal trade) and find it locked. To overcome this, you must wait until the next day. Additionally, if you wish to lock onto a planet for autopilot, you must click on the planet to find the spaceport first. These problems, coupled with the unsatisfying battle, do detract from the game.

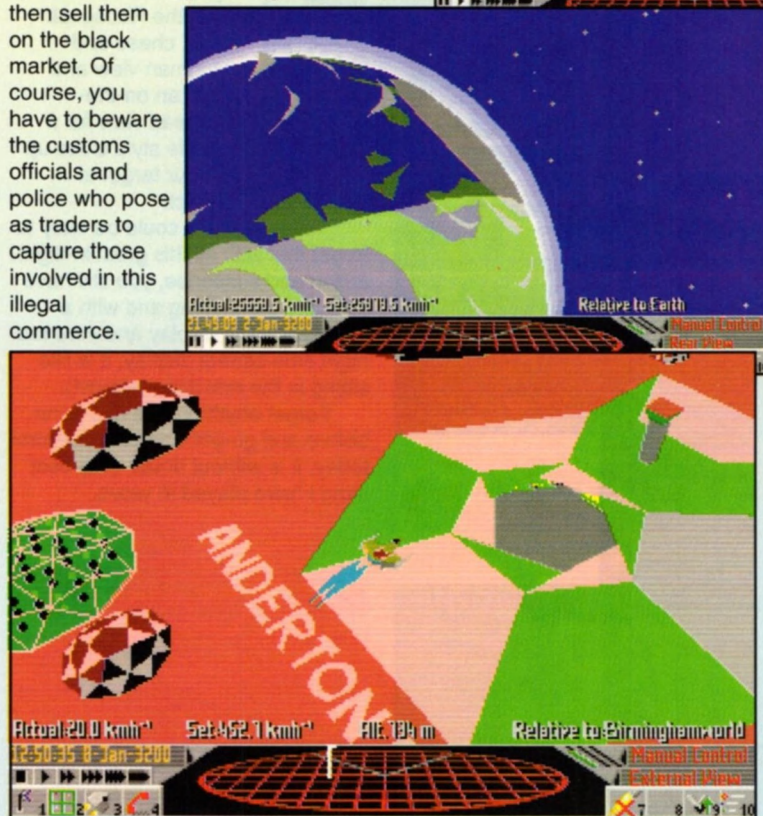
OK, so we're talking about a game that has a scope beyond that of any other. It allows flight and freedom across much of the known universe. You can upgrade and buy new ships and the game has enough playability to outlast most other games. After the wait we have all endured, I would have preferred to have suffered even further delay so that we could all see a game which could be lauded without complaint.

As Frontier stands, it could have been even greater but it is still an exceptional and colossally playable game. And it fully merits the Game of the Year Award.

Perhaps, following the success of its predecessor, we have come to expect too much - perfection. Elite 2 is the game to have; you will enjoy it and it is stunning, but do we need an Elite 3 to sort it all out? **A**

## VERDICT

GRAPHICS	96%
SOUND	56%
GAMEPLAY	97%
OVERALL	95%



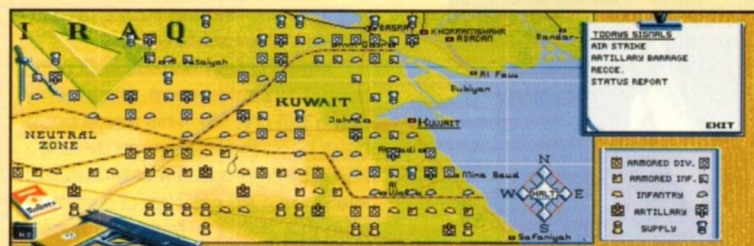
A spaceport on a planet awaits your docking ship, elite



**H**aving criticised Psygnosis for jumping on the Christmas commercial bandwagon with more than a few dodgy releases, Combat Air Patrol reaffirms our view of Psygnosis as a company who can really turn out quality software when they want to.

CAP is a lovingly crafted, beautifully designed masterpiece of programming skill. Created by Ed Scio, (the brains behind that great tank sim Armour-Geddon) with graphics by Jeff Bramfitt, CAP is a war sim based on the Gulf Conflict but concentrating on two fighter aircraft - The Tomcat and Hornet.

# COMBAT AIR PATROL



The full theatre of Desert Storm is at your command.

Two years in the making, the game plays like a dream, with beautifully super smooth polygon graphics in flight, a 3D world of over 360,000 square miles and probably the best cockpit graphics yet. As if piloting two of the fastest and deadliest planes in the universe is not enough, CAP has another more complex side to it, putting you as Commander In Chief of the Allied forces. This is the Campaign mode and the entire outcome of the Gulf War is in your hands. As with the UN coalition C in C, Schwartzkopf, thousands of lives are in your hands and the decisions you make in the War Room will affect our own destiny too... Make no mistake, this is realism in a computer game the likes of which I have rarely seen before.

When in the War Room you need to decide a strategy. Desert Storm was based on the need to drive the Iraqi forces out of Kuwait City and back into Iraq and that's where it stopped. You, on the other hand, may decide to go a different route and try to seek out Saddam himself, hoping that by exterminating their leader, the Iraqi forces will crumble. (Pity they didn't!) Intelligence reports may provide information on Saddam's whereabouts; he may even have been shot down somewhere deep inside Iraq. Alternatively, you may feel that the coalition forces should have in fact continued the retaliation up to the point where Iraq itself was invaded and Bagdad attacked and

taken. All this is possible within CAP; what you need is a strategic mind and nerves of steel!!

Your troops and tanks are easy to direct from maps and recon slides available in the War Room, but you must remember to keep your attacking forces supplied at all times. In the Briefing Room, you must relay all the mission information to your pilots, including weather reports, recon pictures and SAM and artillery sites. Then, what better way to lead your troops than by getting in to your own fighter and the doing the business with the rest of the lads?

All your missions, both day and night, start from the deck of the aircraft carrier USS Roosevelt. For the budding hero pilot a vast array of training options is available, including setting the maximum number of enemy aircraft, personal damage limitation, invincible wingmen, unlimited weapons, crash damage, hill collision and payload limits. So you see the game can be played by a novice or vet - you merely adjust it accordingly. In training mode, all kinds of missions can be

**Psygnosis 1 Meg £24.95**

tried out, practicing take offs and landings, flying to and from targets, beginning over targets, day and night sorties, etc.

What about the missions? You get to do the lot. Fleet defence intercepts, bridge busting, train convoy smashing, runway

straffing, bombing airfield shelters, AAA suppression, convoy strikes, gunboat hitting and, of course, scud seek and destroy. Absolutely nothing has been left out of this masterpiece, even mid-air refuelling, a vital part of the campaign, is included. Some of the views are breathtaking, with great external shots such as a flypast mode, view from the Roosevelt deck, chase and wingman view and even an on-the-warhead view for a missile style close up of your target at impact!

It could be easy to forget that with all this great in-flight action and suspense, you still have to fly the damn thing and with a complete HUD display and infra red night time control display, it is like sitting in the real thing (almost).

Forget anything that has gone before and go get Combat Air Patrol today, it is without doubt THE best thing I have played in years.

Good satellite intelligence is crucial.



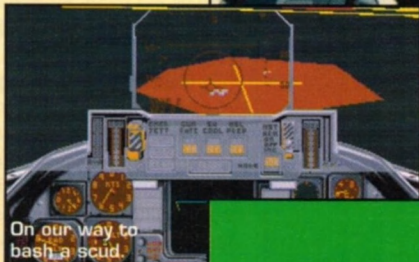
A part of the great intro sequence.



Pick a mission, any mission.



The debrief on your safe return.



On our way to bash a scud.



OK, boys. Let's head for home.

## VERDICT

GRAPHICS	95%
SOUND	90%
GAMEPLAY	97%
OVERALL	96%



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# entertainment!

## now!

Straight out of the Zool/Harlequin/Lost Vikings school of platform games, Alf Chicken is up there with the best of 'em. Colourful, zany, and 'puzzle pecked', you are assured of burning many midnight hours with this one.

Alfred, the world's only chicken with a bionic beak, has been whisked off, together with his friends, to a multitude of bizarre lands by the evil Mega-Chickens. Of course, he has to do the honourable thing and go find the lads before he can even hope of escaping, so you are plunged from the start into wacky birdland. There are over eleven levels to get through, each one containing many different rooms and puzzles, even some secret chambers, although beware, there is a lot of chopping and changing between rooms

before you can get through to the next level.

Alf can defend himself by either



It's smiley faces all round with this excellent platformer.

## ALFRED CHICKEN

Mindscape 1 Meg £24.99

jumping on the baddies, or diving beak first down onto them. The rest of the time you are hopping from one platform onto another, sometimes using springs to get better lift up onto the higher reaches of the level. Loads of bits to collect, plenty of ne'er do wells to knock off and some pretty damn cool music to do it to.

So what can go wrong? Not a lot really, although I suppose it would have been better to have more defined restarting areas once you have died and some kind of save game feature would have been helpful, but why complain about small nagging omissions when the overall game is so much fun to play.

So, if you liked Zool, or Harlequin you

will not be disappointed with Alfred Chicken who has done for platformers what Colonel Sanders has done for lickin' fingers.

### VERDICT

GRAPHICS	85%
SOUND	80%
GAMEPLAY	70%
OVERALL	79%

## Alien 3

Virgin 1 Meg £25.99



A film licence. Need I say more? The film was a good third installment and there was a coin-op Aliens game, which was quite fun and similar to this one. However, Alien 3 the game is a tired platform shoot 'em up wrapped in a moody box and offering nothing new. The graphics are poor, the music is the worst for quite a while and the whole game is a

Erm, excuse me. I hate to interrupt, but...

good reason for making film licences illegal.

Ripley, instead of looking like a real hard case, appears more as an anaemic anorexic. The best line from the film was "You mean there are no weapons of any kind", but here people leave them all over the place - not a good idea for a prison colony. They should have gone the whole distance, completely ignored the film and created a good, original platform blaster, but then it wouldn't have been a film licence, would it?

After the brilliance of Dune 2, which is a sort of licence, Alien 3 does Virgin no favours. It looks

cheap and nasty, thrown together and outdated.

The best thing to do is buy the film on video instead; it's infinitely more entertaining.

### VERDICT

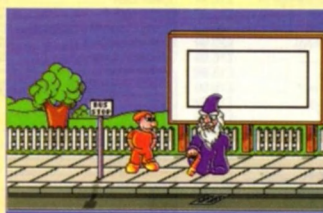
GRAPHICS	44%
SOUND	34%
GAMEPLAY	32%
OVERALL	30%

## BOB'S BAD DAY

Psygnosis £19.99

Bob's Bad Day is a very dire offshoot from Marble Madness, that great, gravity defying game of pure frustration. This, on the other hand, poses absolutely no threat to anyone over the age of four, at least as far as the first twenty five trainer levels are concerned. After that, although things got harder and meaner, I'm afraid I gave up through sheer boredom. OK, it's colourful, harmless fun alright, but I think today's game players are a lot more mature when it comes to picking their entertainment and should give this one a very wide berth.

The plot, for what it's worth, concerns our hero Bob, who is minding his own business, when he bumps into a wizard and that's when his troubles start. After incurring Wiz's wrath, he is flung limbless into maze land with only his head to roll on, searching for his lost arms and legs! See what I mean, you hate it already!



I knew it was going to be a bad day when a wizard turned me into a marble...

Bob's job is to roll and bounce around each of the 100 levels collecting the coins that you need to escape, but this is made more difficult by the constantly changing gravity and the monsters that feed on the coins. Terminal boredom soon creeps in as the maze puzzles and the monsters all begin to merge into one horrible nightmare. Not even worth a joke about Bob

being left out on a limb, let's put this one down to Psygnosis having a bad day as well as Bob, eh?

### VERDICT

GRAPHICS	40%
SOUND	35%
GAMEPLAY	41%
OVERALL	41%

## PRIME MOVER

Psygnosis £19.99

Whilst on the subject of charting Psygnosis's bad days, here's another obviously gloomy Monday. Prime Mover has the word BUDGET written everywhere except on the price tag, which, along with Ocean's Burning Rubber, is where these releases should fester. It is sad to see a company so obviously talented as Psygnosis (see Combat Air Patrol) bend to commercial pressure and release a cartload of average products, presumably for the Christmas rush,



There is a choice of bikes, but so what?

instead of their lovingly crafted individual blockbusters.

Average is one thing, but adspeak marketing hype is another. Just read the

box description: "The smoothest, most realistic arcade motorcycle game ever... Featuring five AWESOME bikes, a HUGE selection of the most challenging tracks from around the world, with realistic and testing riding conditions, Prime Mover screams into pole ahead of all the competition...sample the power and sheer excitement of the international bike racing circuit..." Enough!! Prime Mover is nothing more than your average 3D perspective bike sim, which frankly, when compared to Super Hang On or Thalion's No Second Prize, keeps it strictly in the pack of hangers on.

You can customize your rider, choose to practice on any of the tracks and elect to use either a manual or auto gearbox. Other than that, your choice of the five bikes is limited to a combination of either fast

acceleration or a high top speed or a bit of both. There seems to be very little computer rider intelligence and although you do get to compete in a full championship, the fact that you don't relate to the other drivers makes the whole thing unrealistic.

### VERDICT

GRAPHICS	60%
SOUND	50%
GAMEPLAY	30%
OVERALL	30%



**Team 17 1 Meg**  
**£26.99 32-bit £29.99**

# BODY BLOWS 2

Unbelievable as it may sound, there are fighting games other than Mortal Kombat and Streetfighter 2. Thank heavens. The original Body Blows had a few drawbacks - disk accessing, gameplay, etc. This sequel is much improved and provides the best beat 'em up I've played for ages.

The graphics are excellent, especially on the enhanced version, but the sound is the usual blend of "hyas" and "oofs". The moves are easier to access than they were in the first one, but like all games in this genre, the difficulty, when playing against the computer, is that it can access the moves

quicker and smoother than any human. Whilst you wreck your joystick putting together your punch, it is doing a ballet of kicks, jumps and special moves. Unfair, I cry.

This is the best fighting game of its type on the Amiga today, far outstripping Streetfighter 2, but what wouldn't? Maybe I'm an old cynic, but it's almost as if people release a good game in an imperfect state so that they can then release a sequel and say that it's even better and those 'problems' have been tweaked. Why weren't they 'tweaked' originally? Twice the money for the same product.

If you haven't got the original

or if you loved that one, then Body Blows 2 is the beat 'em up for you. If text adventures are your cup of tea, don't buy it. **a**

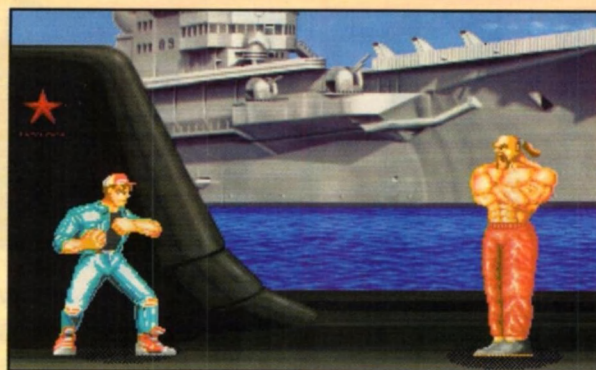
## VERDICT

**GRAPHICS 85%**

**SOUND 72%**

**GAMEPLAY 86%**

**OVERALL 82%**



In the navy...we get to fight on submarines.

# BRUTAL SPORTS FIELD

**Millenium**  
**£25.99**

More violent than Speedball 2. Surely not? Well, yes, actually.

This side viewed 'future sports' sim allows you to cleave the opponents in twain and carry their heads around as trophies. Since this is the case, it's so much fun to play against a friend and decimate their team. "Hang on! You can't do that!" "Oh, but I

can. Oh, but I have!!!"

This said, it doesn't have the gameplay that the old classic Speedball has. The graphics are great, the sound iffy, but it gets crowded and impossible to work out who's who and the player selection isn't perfect. The problem is, things are just easier when viewed from above and



Like an ordinary game of footy really, except with swords.

that's why Speedball worked so well. I actually had problems running the program and only had

some of the functions working, but I'm assured these are unique to my inadequate self. If you are

languishing at the top of the Speedball league and looking for a challenge, then Brutal Sports Football is worth checking out. Violence and the occasional goal being scored - sounds like an ordinary game of footy really, doesn't it? Except with swords. **a**

## VERDICT

**GRAPHICS 83%**

**SOUND 60%**

**GAMEPLAY 86%**

**OVERALL 78%**

# Stardust Bloodhouse

**£16.99**



Stardust. We had to keep this one away from inquisitive rock stars.

It's Rocky 400. Not the last ever Sly film, but the 400th Asteroids clone since the original wireframe game hit the arcades from none other than Atari (who?).

You have to penetrate enemy space zones, rotate left or right, move about a bit and, erm, blow the tumps out of large spinning space rocks, smaller spacecraft, anything apart from yourself really. Grab any powerups which the rocks or spacecraft are carrying or concealing for a poor bit of speech and a good bit of extra firepower.

After each screen of frantic genocide, you get a breather and a chance to choose a new map sector. Each sector gives you a percentage of difficulty and conquered space

zones have, suitably enough, a large red cross smack bang in the middle of them.

After wiping out a zone, which is tricky, you have to fly down a tunnel and blast lots of large, chunky objects, which is even trickier. Then it's more of the same, until either you die, or they do. Sylvester Stallone, it's rumoured, is currently bidding for the leading role of the film version. Graphically, Stardust is pretty impressive. The asteroids are very attractive, rotating more convincingly than the heads of men passing Kim Basinger in the street, while sounds are confined to the standard driving music track and dragon belch explosions.

Bloodhouse is a newcomer to

the software scene and, if Stardust is anything to go by, the company's name is a very apt one. It's good to see a mid-price product which could show some more expensive products a thing or two. **a**

## VERDICT

**GRAPHICS 81%**

**SOUND 78%**

**GAMEPLAY 83%**

**OVERALL 80%**

# TURRICAN 3

**Renegade 1 Meg**  
**£25.99**

What can I say? Turrican 3 is the third in the Turrican series. I bet that surprised you.

This series has a robotic hero, or as we now discover, a bloke in a metallic ectoskeleton, blasting through levels of platforms with loads of different weapons. Each time the game has kept the most fun weapons and tried to bring in a few more. In this installment, we say goodbye to the all-round laser (pity) and hello to a weird grappling hook.

Bang, blast, thud, boom.

That's the gameplay. In seriousness, this is the best of the three, with a great intro. If you like platform games which involve shooting everything, then Turrican 3 is for you. Personally, I hate having to learn the level layouts by heart and hate getting lost trying to find an exit. It may be that you adored the other two and cannot wait to get your hands on this one (and I do know of people for whom this



The metal maniac returns for yet more mutilation and maiming.

is the case). However, if you only thought the others were OK, but don't fancy more of the same, then beware.

Turrican 3 has good graphics, reasonable sound, but predictable gameplay. **a**

## VERDICT

**GRAPHICS 82%**

**SOUND 70%**

**GAMEPLAY 80%**

**OVERALL 74%**



It's  
time,

Not many people know about the Hit, a mysterious and often misunderstood animal which rarely raises its head above the monitor top. Many people go through their complete gaming lives without owning even one.

But when a Hit shows its face, it is much sought after. So much so that, when the *au*i team were giving the deepest consideration to choosing the best games of the year for this *au*i, we had to build a special hide in a nearby Virgin Megastore, in order to best observe the Hit in its natural habitat.

By an incredible coincidence, a

huge 13 Hits showed themselves, easily the biggest independent group seen in 1993. So we did what any self-respecting journalists would have done: we shot them and stuffed them. They now adorn the walls of the *AUI* offices.

Even fewer people is this is the annual Hithunting season. Presumably, the Hits themselves didn't realise either, otherwise why would they have been so blase about their terrible fate? Or perhaps they are just too stunned by hype flying around at this time

of year to care. Who knows?

You may be thinking, "Poor wee creatures these put upon Hits!" If so, you're going to be revealed as a raging hypocrite, as we at *au*i are about to offer you the chance to go Hithunting yourselves. And we bet you take it!

THE  
HITHUNTING  
PRIZE!

What you can win is nothing less than the very best games of 1993. Every single game in our list of really smash Hits of the past year is yours and yours and yours and yours. For there will be five winners each to receive the who bunch of 13 Hits. you can play 'em, stuff 'em, 'eat 'em, give 'em to your Aunt Maud - we really don't care - they'll be your very own stable of Hits.

13 Lucky  
Old Hits

These are the Hits  
that was (were?)

## Desert Strike

Electronic Arts



If you see 'Huntony' flying in his private jet, be sure to blast him out of the sky with your blistering chopper. Armed to the rotors with massive missiles and chewy cannons. Saddam Hussein would have liked to have played with this game before he took on the Allies in the battle(?) for Kuwait.

## Dune II

Virgin

When you've finished watching the re-runs of Star Wars this winter, why not blow apart a planet for real in Dune II? Dune II involves stealing a load of powder from the planet Arrakis and selling it to someone, without being tempted to sniff the lot away.



## The Patrician

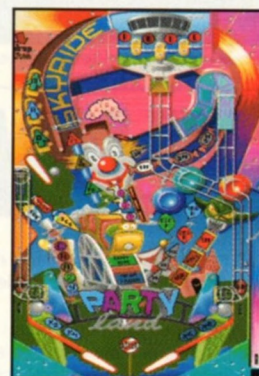
Daze Marketing

If corruption, violence and death are common in your household, then you'll have no use at all for this classic strategy game. However, if you've yet to make a killing out of fine silks and haven't contracted the plague either, this might be the Hit that changes your life.

Pinball  
Fantasies

21st Century

The CD Edition of PF is so unbelievably great that the Government are considering a total ban on the title: this is because all of the kids who were hanging around, stealing cars and causing social outrage, are now playing it instead. And, without that, no-one's got anything left to moan about.



## Syndicate

Electronic Arts

Hithunters extraordinaire abound in Syndicate. Argue with these guys and it's a fate worse than spending





# Hithunting folks!



## WINNING WAYS

*All right!*

You're now gagging to know just how you can win a huge pile of Amiga games...

All you need to do is fill in a postcard or the back of a sealed envelop with your answers to the following questions:

- 1 Which country did Saddam Hussein invade?
- 2 In which films did Chewbacca appear?
- 3 Who wrote the book on which Dune is based?
- 4 Which game does Flashback resemble?
- 5 What science fiction machine is the game Walker based on?
- 6 What other famous game besides Syndicate have Bullfrog created?

Name and address on a postcard please which must reach us by February 28th.



The AUI Hithunter Comp  
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LONDON W1H 5RF

Winners will be drawn out of the Editor's flying cap.

*Happy  
Hithunting!*

your summer hols with the cast of Birds of a Feather. The only language the hoods in Bullfrog's classic game understand is violence. Which means that this game surely deserves to be in everyone's collection.

## Blade of Destiny: Realms of Arkana

US Gold



This excellent RPG could bring Tolkienesque lands and people to your winter gameplaying. Bigger than the large-print edition of the Encyclopaedia Britannica and more packed with things to do than an Antigua beach party, with the cast of Ben Hur as guests.

## Combat Air Patrol

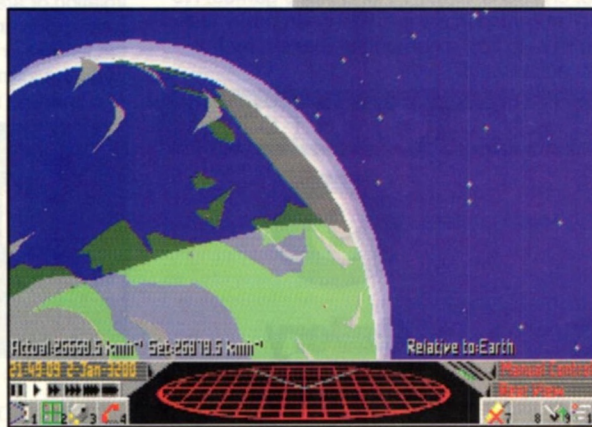
Psygnosis



## GAME OF THE YEAR Frontier: Elite 2

Gametek

What can we say about a game which will sell and sell? Elite 2 may not close the chapter on Elite - but this game is worthy of the award of Game of the Year 1993.



Chewier than Chewbacca's chewing gum, harder than an oven-baked diamond, more complex than BT's billing system and more fun in the air than riding bareback on Concorde. And it's by Psygnosis. Need we say more?

## Flashback

US Gold



This isn't just a Flashback by name: the gameplay is very similar to the Commodore 64 classic Impossible Mission. Which is, if you can remember said game, no bad thing, because IM was excellent. And if you can't remember it, never mind, because this wander down memory lane is ace.

## Walker

Psygnosis



If, after watching Star Wars re-runs again (because you probably videotaped them), you find yourself thinking, "Wow, those Scout Walkers are COOL! Where can I get one?", don't bother calling Talking Pages - play Walker instead.

## Premier Manager 2

Gremlin Graphics

No list of fabby games could be complete without a mention of Gremlin. Premier Manager 2 is not the only game in the world to be based on this theme - but



the fact that Graham Taylor was seen buying one recently should tell you something about how good it is.

## Disposable Hero

Gremlin Graphics



D-Hero is no more original than the concept of breathing, but it's fast, furious, fast, furious, fast AND furious. Oh, you also get to shoot lots of things in a fast and furious manner.



**L**ooking over the issues of *AUI* from the beginning of 1993, the subjects of the games reviewed have ranged from mathematics and reading to data bases and special interest programs such as caring for ponies and even drug advice - no, not about how the sixth former Katies and Michaels can best sniff that white stuff!

The test of a good game according to the adults who most likely pay for the program may be value for money - the number of times a game is played but perhaps more importantly the educational value - how it helps to teach the child to use its mind either formally, in the National Curriculum or other academic standards, or informally, in just generally improving the child's intelligence.

The kid under the hammer, being told to learn from this lovely game, dear, may not take the same view. Excitement, fun and that indefinable term, playability - even in an educational program - are what counts...or reads...or calculates. A program that is likely to satisfy both parties is not always easy to find.

This personal top ten fulfill my own criteria for what constitutes a good program. These include ease of use and value for money - but most of all the ability to learn something new and useful through educational entertainment. And such a program has to compete on equal terms with the slickness and expensive high professionalism of childrens' films, TV and video games. No easy task, but one which, with the programs in my list, has been pretty well achieved and one that has begun to help home computing make a real impact in a wide range of different educational fields.

## In reverse order

10

### Compendium 6

Genisoft £39.95

Yes, you may well remark, isn't it cheating a little to include a compendium with six programs? You have a point, but in fairness I might not have included any of the six in my list, however, collectively in a boxed set I think Genisoft put together a very good assortment of programs for children aged 4 to 12 years, and for this reason it gets 10th place.



I admit that I cheated to get this county's name - I need this geography program as much as anyone!

Written by Helios, Calender Quiz, Words and Numbers, Kids Type, What Is It? Where Is It?, Weather Watcher and Game Set and Match make up the pack so that maths, science, geography and English are all covered in a value for money set.

9

### Gallery

Helios £59.95

In the age of multimedia, this beginner's level database stores text, pictures and sounds. It is easy and fun to use and the inclusion of sounds and pictures make it instantly more appealing than the usual databases.

Gallery has the ability to store and review IFF pictures, sounds and text



Multimedia for youngsters. Files of unlimited length, attached to each record. These can be all combined in a variety of ways to produce 'slideshows' and multimedia presentations through a simple user interface. A demo of the capabilities is shown on the disk which comprises a series of birds complete with bird noises, information and pictures. Of course the Amiga is ideal for making full use of the graphics. Its place in the top ten is for the scope and potential of the program, particularly now that school children are being encouraged to present their projects in a professional way through the use of technology.

## Rounding off a good year, Martin Witton has compiled a personal top ten educational games from those reviewed in *AUI* in 1993.

8

### ADI Reading

Europress £19.95

ADI has featured regularly in the *AUI* educational pages and judging from my mailbag, children either find him irritating or are totally addictive. The latter group are those children who like the familiar or recognisable characters, while the former prefer the challenge of something new.



I thought the program wasn't working!

Of the ADI programs reviewed in *AUI*, Reading with ADI Junior, aimed at 6 - 7 year olds is the favourite which is why it gets 8th place. The games are lively and the three levels of skill in each game encourage children to do better. The graphics are very clear, which is one of the reasons I have included this program. Many English programs we have reviewed fail to provide sharply visible graphics, making identifying objects difficult, let alone the spelling of them.

The specific age range is another bonus, as ADI Reading caters for both beginner and more able child within the framework of National Curriculum key stage 1, but working at individual's own pace. The boot up time is slow, but generally the aims to enable children to tackle harder words and develop listening, memory and observation skills are realised.

7

### Kid Pix

Broderbund Software

£25.99

Paint programs for children (and adults too), allow the imagination to

run free utilising all the best characteristics of the Amiga. Who could resist Kid Pix with the Leaky Pen - where ink soaks into the drawing pad whenever the pen stops moving - and no mess to clear up - or the challenge of Zig Zag to draw a straight line?

The creativity within the program gets my vote as it stimulates even the most unartistic amongst us. Northern Lights gave us some colourful aurora borealis and Fuzzer fuzzed up



After you've finished, blow up the picture!

whatever it moved over. With the Electric Mixer transforming the creations by mixing them up and the great Undo Guy (the eraser of course), the Wacky pencils and Wacky paintbrushes, the whole lot can be printed out or exploded to clear the screen. But what gives this paint program the mark of a winner is the amazing range of sounds - paint gurgles as it pours and letters speak their names. You can even choose a song to accompany your Kid Pix pictures.

6

### Mathematics

#### Number

10 Out of 10

£25.95

It may be illusionary, but I find that Maths programs are more fun than those for English. I had to include Mathematics Number as it told me I was a genius! (At N C attainment target 2 that is!)

10 out of 10 Mathematics Number is a suite of six educational games, designed to help children get to grips with 36 specific topics. Intended to sharpen up the mental processes, the



# OF 1993

four levels also have a high score record and speed is combined with accuracy to provide the total which can be printed out on a certificate.

An added pleasing little touch is the option to send the disk to be



Snakes and ladders with sums.

printed out on quality paper by Triple R for the cost of £1 - and they will return the disk!

## 5

### Fraction Goblins

**Coombe Valley Software**  
**£14.99**

My comments in the introduction that children may have different ideas from their parents on what constitutes a good program are borne out here as one of our regular testers, Victoria, declared that this would be her first choice.

A few years ago I would have been amazed if a schoolchild had told me that a program designed to give practice in fractions featured at all in a top ten, let alone first place but my disbelief has been turned over since being involved in the capabilities of the Amiga combined with educational software.

Fraction Goblins is suitable for 8 - 13 year olds and the aim is to give



It's easy to see where all the fractions are here.

practice in the four rules of arithmetic as applied to fractions. A simple enough theme presents the player with the task of collection a set of lost items from a pencil case by solving clues in the form of fractions before the goblins get to them first. What appears to appeal to children is not the serious amount of mental arithmetic involved as the challenge of problem solving with accompanying comments

by the computer as the program understands a vocabulary of around 200 words.

## 4

### Word

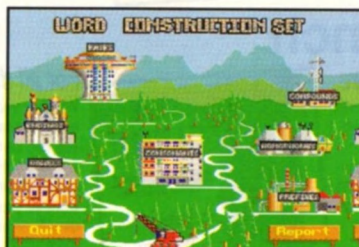
### Construction Set

**Lascelles Productions**

**£29.95**

The use of language is not given as much weight in the education system as much of us would like. The meaning of words, their construction and derivatives are largely ignored and with the demise of Latin teaching in secondary schools, the opportunity to consider the root of our language is being lost.

The structure of Word Construction Set makes intelligent use of the computer to allow the learner to



Making words up as you go along.

build up an understanding of the way in which words are formed. It stirs the imagination and offers help to poor spellers.

Base Hotel explores the 50 Greek or Latin bases used in 150 words divided into 15 sets, with each set having 2 or 3 roots to be used in constructing words.

For children fed on a diet of Eastenders or Neighbours, this program may offer some enlightened thought on the more complex and interesting use of words and, of course, it's jolly helpful when playing Scrabble!

## 3

### THE BRONZE MEDAL

### Merlin's Maths

**Euopress Software**

**£25.99**

Fun School had to feature in my top ten, and Merlin's Maths just took the prize as part of Euopress' Fun School Specials range. Designed for 7 to 11



Count the soldiers - magic!

year olds, the interesting feature of this program, which gave it the number 3 position, was the problem solving as part of the story rather than as a separate exercise. The additional effects of the sounds produced from waving the magic wand - ducks quacking, arrows flying and the odd explosion enhanced the enjoyment. Really fun.

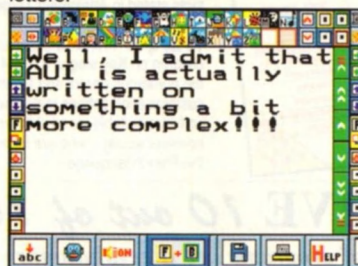
## 2

### THE SILVER MEDAL

### Childsplay

**Helios Software £24.95**

Just pipped at the post, but a close runner up is Childsplay, which is a talking word processor with creative graphic design functions for children aged 2 to 12 years. No, it is not a misprint, it really is suitable for children as young as two years old with amazingly colourful pictures and letters.



What more can I say? A word processor for 2 year olds.

With design and presentation featuring highly on all levels of project work, getting to grips with a good word processing program at an early age is

vital. One small person of two years, Jonathan - sometimes oddly known as "Blake" - who regularly visits the Witton household, when he is not making straight for the biscuit tin, is collecting leaves, and his Mum has helped him put a lovely scrapbook together using Childsplay.

At the other end of the age range, Jonathan's brother, Andrew, is using the program for the dual layered graphics display and tangram blocks. A superb program. (All you need is for Father Christmas to bring a colour printer to get the full effects of Childsplay!)

**Taking the Gold Medal in first place, I Have no difficulty in awarding the 1993 AUI Top Edutainment prize to:**

### Maths Algebra

**Ten Out of Ten £25.95**

From the 10 out of 10 stable comes Maths Algebra, designed with all the stimulating and exciting games skill we have come to expect from them as educational specialists on the Amiga.

The company has taken the unusual step of producing an algebraic program children from age 6 - 16, where the younger age group may well have not have come into contact with algebra at all. Being blissfully unaware of the implications of algebra, they can be introduced in a way which is not intimidating. But the wide age range means that all school children can enter at any level which gives exceptional value for money. Algebra as a subject may not sound all that terrific but the children who play it, love it and learn from it. What more can you ask?

10 Out Of Ten Maths Algebra meets all the criteria for an outstanding educational program and fully deserves first place as the Edutainment Program of the Year. Ten out of Ten for it!



Y out of Y for this program when Y=X+1 and X=9!

## Info

Coombe Valley Software  
18 Nelson Close, Teignmouth  
Devon, TQ14 9NH  
Tel: 0626 779695

Euopress Software  
Europa House, Adlington Park  
Macclesfield, SK10 4NP  
Tel: 0625 859333

10 Out of 10  
1 Percy Street  
Sheffield S3 8AU  
Tel: 0742 780370

Lascelles Productions Ltd  
401 Lascelles Street  
PO Box 959  
Hastings  
New Zealand  
Tel: 0064 6 878 9652

Helios Software Design  
163 Huthwaite Road  
Sutton-in-Ashfield  
Nottinghamshire, NG17 2HB  
Tel: 0623 554828





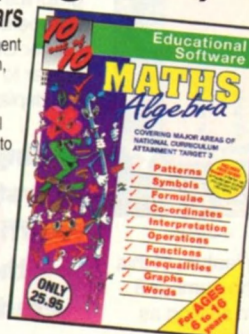
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## Maths (Algebra)

For children 6 to 16 years

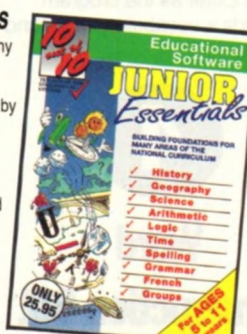
Covering many areas from Attainment Target 3 of the National Curriculum, the 10 out of 10 Maths (Algebra) package is packed with subjects, levels and activities to challenge all children from Key Stage 1 right up to Key Stage 4. Following sequences, interpreting graphs, solving equations and numerous other algebraic skills have never before been so much fun. This is the fun way to practise and become fast and proficient with the manipulations needed for high examination marks.



## Junior Essentials

For children 5 to 11 years

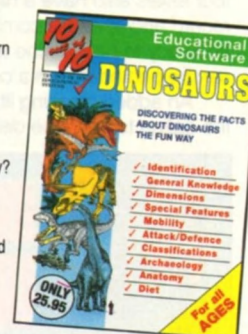
A truly flexible package covering many topics essential for building a good educational foundation. The areas covered have been carefully chosen by a team of experts and come from several subjects and levels of the National Curriculum. The child's progress in these areas is constantly monitored and recorded and parents or teachers can easily discover where a child needs help. As with all the 10 out of 10 series, further motivation to play the games and learn more is added in the form of High Score Tables.



## Dinosaurs

For all ages

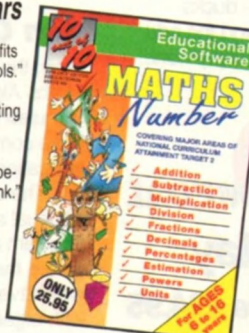
This package is the fun way to learn the truth about dinosaurs. The six games all have superb digitised graphics to make a whole area of history – dinosaurs – come alive. If you came face to face with a tyrannosaurus would you run away? Or are you safe because it's a vegetarian and wouldn't eat you? This, together with 100s of other interesting facts, can be discovered from this enthralling package. The six games – all with single and multi-player options – are educational fun for everyone.



## Maths (Number)

For children 6 to 16 years

"Well thought out to offer real benefits to children studying in British schools."  
– PC Plus (July '93)  
"Educationally worthwhile and exciting to play – a rare combination."  
– Archimedes World (December '92).  
"Unique in home-based programs because of the National Curriculum link."  
– The Micro User (September '92)  
"Excellent for reinforcing specific mathematics knowledge."  
– Junior Education (July '93)  
"The 10 out of 10 Series lives up to its name."  
– PC Home (August '93)



## Early Essentials

For children under 7 years

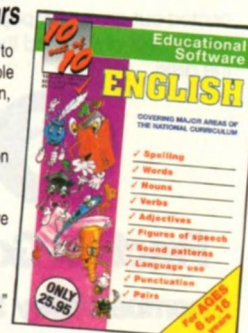
"Outstanding. All of the activities are not only very enjoyable but they're well thought through. It's one of the best multi-purpose infant packages I've seen in a long while. If you have young kids get it for the home. If you're a teacher, hammer on the headteacher's door and beg for money to buy a copy."  
– Archimedes World (July '93)  
"At just £25.95 you'll be hard pressed to find anything which even comes close to Early Essentials."  
– Micro Computer Mart (Sept. '93)



## English

For children 6 to 16 years

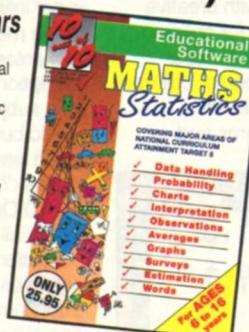
"Everything being done is relevant to the player's education. An invaluable curriculum experience, plenty of fun, lots of variety."  
– PC Home (November '93)  
"Guaranteed to sustain the attention of even reluctant learners."  
– RISC User (January/February '93)  
"Most importantly, as the games are fun, children can't help but learn."  
– Acorn Computing (March '93)  
"Allows progression from Junior school age right up to GCSE level."  
– Amiga User International (Sept. '93)



## Maths (Statistics)

For children 6 to 16 years

Attainment Target 5 of the National Curriculum is Data Handling – a vital area of Mathematics. 10 out of 10 Maths (Statistics) covers 36 specific topics from that subject. In this package, recording animal sightings in an animated pond or rolling dice are just two of the many challenges that children will relish as they learn about statistics. And can graph drawing be a game? It becomes arcade action as bricks and bombs are dropped onto the charts. This is a really enjoyable way to learn about statistics.



## French

For children 6 to 16 years

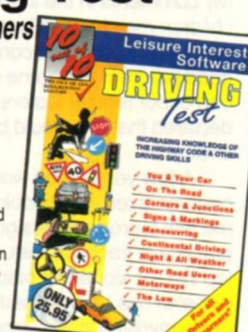
This suite of six educational games will give fun and motivation to all children learning French. The package is designed with the Modern Languages National Curriculum firmly in mind and contains many challenges to reinforce facts stated in Attainment Targets 3 and 4. 10 out of 10 French is essential for children on Key stages 3 and 4, but the numerous parent and teacher customisation options make the software suitable for all children – however young – who are learning the French language.



## Driving Test

For all drivers and learners

Whether you're a novice learner or an advanced expert, there's plenty you can learn from this package. There are thousands of built-in questions and you can choose whether you want to answer them directly or add to the fun by trying them within games. The six games have been designed to be fun for all adults and include strategy, mental agility, coordination and more. And, if you think you are up to it, you can "take the test" – a challenge covering many areas of the Driving Test.



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The 10 out of 10 Series is available for Acorn 32-bit computers (Archimedes), Commodore Amiga and IBM/PC and compatibles. If you buy any two items before Xmas 1993, £15 will be deducted from the total price. At the time of going to press, titles marked \* were not available on all formats and may not be released before Xmas. They may however be ordered at the offer price. Please ring for availability.

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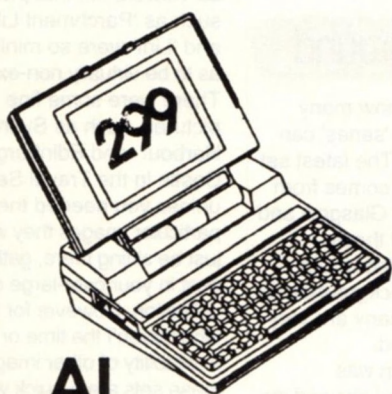
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# The Video Column

## Alan Puzey takes a look at some of the latest offerings on the video computing scene.

**P**almcorders are becoming increasingly sophisticated. The advantages of being able to take it everywhere, in a pocket, are obvious.

Of particular interest to computer-editing enthusiasts, the NV-S85 has VITC timecode read/write facilities built-in, allowing frame accurate editing. Unique, I think I'm right in saying, in a camcorder of this size at this time. The additional features indicate that this camera is aimed at the high-end of the hobbyist market.

There is a hi-fi stereo sound, digital picture signal processing and effects, and sockets for external microphone and headphones. The lens is a 10x zoom with 20x digital extension. Exposure control is via five AE modes including full manual control. As with so many companies these days, "simply the best" picture performance is claimed by the makers, this time with their exclusive

'Digital Crystal Clear Processing Circuitry', which allows the luminance and separate RGB signals to be individually corrected when necessary.

The digital picture processing effects are very similar to those I am used to on the Canon A2; apart from the 20x digital zoom they include image stabilizer, strobe effect, wipe and mix, and gain-up – one of my personal favourites that as well as allowing filming in light levels as low as one lux, can be used to produce really impressive slow motion/dreamlike effects.

Another probably unique feature is a battery saving function that turns off the viewfinder and autofocus motor (professionals shouldn't be using this anyway!) whenever the user's face is more than 10cm away. Although any saving of battery power is useful, I feel that a feature such as this could become an annoyance to any hyperactive videographers who are frequently moving



Digitized picture of the new Panasonic camcorder which has some unique features.

their eye to and from the viewfinder.

A reservation I have of the Panasonic is that it uses the VHS-C format, as do all Panasonic camcorders (as viewers of the current television ad will know). For some time I have been of the opinion that the 8mm format is superior and have therefore built my system around that – until the next major upgrade is called for! But there are many consumers who will swear by VHS-C and produce equally good results with that equipment.

The Panasonic NV-S85 costs around £1200.

### INFO

Contact: Panasonic  
Tel: 0344 853943.

### background

I wonder just how many more of these 'series' can be sustained. The latest set I have viewed comes from VideoWorld in Glasgow and whilst some of these pictures included would make good backgrounds for video titling, many are very ordinary indeed.

This opinion was endorsed when I showed the images to two video colleagues. The consensus was that the majority of users of this type would probably be using 'Scala' to produce their titles and the images were no better than those provided with the program.

If you want images different from the Scala's,

why not prepare your own sets, using a simple and inexpensive device such as the Vidi-Amiga digitizer? It is very easy to digitise live images or pictures to produce a range of attractive backgrounds.

What does the "Nexus Pro" series from VideoWorld offer? Two versions: an AGA one for 4000 and 1200 Amigas, and 16 colour Hi-res interlace pictures for all previous Amigas. Either version comes in six sets, each consisting of ten disks. The six sets are: 'Papers', 'Fabrics', 'Textures', 'Travel', 'Weddings and 'First Communion' and 'Introduction Pack'. With the AGA picture files being in the region of 400k, there are only two pictures per disk.

Whilst there is no disputing the quality, my co-viewers felt that pictures such as 'Parchment Lilac' and 'Lint' were so minimalist as to be virtually non-existent. There were some fine pictures, such as Sydney Harbour and Edinburgh Castle in the Travel Set, but unless you needed these particular images they would just be sitting there, gathering dust in your over-large disk collection. However for those who haven't the time or the availability of other images these sets are a quick way out.

Each set of ten disks costs £29.99, or the complete range comes at a special price of £130.00 a

### INFO

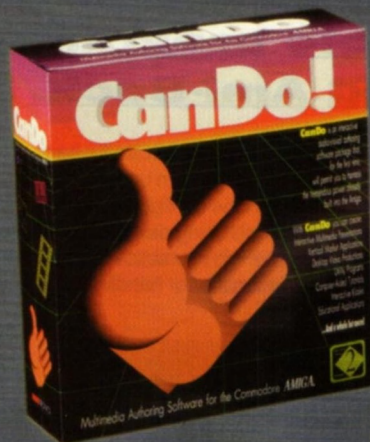
Contact: VideoWorld  
8 Ardoch Gardens,  
Glasgow, G72 8HB  
Tel: 041 641 1142.

One of the best pictures from the Nexus Pro collection – certainly suitable for wedding videos.





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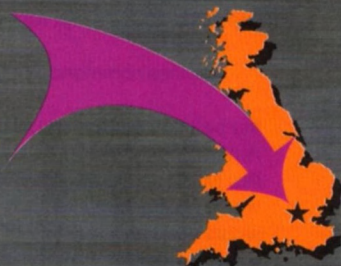
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# ARexx

## INFO

**D**irectory Opus is a directory utility program from Inovatronics and one particularly useful characteristic is that its buttons can be tied to ARexx scripts. These scripts can then be executed by clicking on the appropriate buttons. There are a large number of ARexx usable commands available (far too many to mention) but here are three examples:

### All

selects all files and directories in the active window.

### Copy [name] [destination]

copies all selected files and directories in the active window to the inactive window or specified destination.

### Status value [set new\_value]

This command performs many different functions and the value parameter is used to identify the various operations. For example, a value parameter of 3 will reset the active window and so the command 'Status 3 Set 0' would activate the left Directory Opus window, making it the source window. The value parameter of 13 signifies that a device or directory is being specified and so a 'Status 13 Set Work:datafiles' command would read the datafiles directory of a disk (or hard disk) labelled Work: into the active window. The Status command allows you to combine the window and directory parameters, so to use these commands for setting up a custom button that would read the above directory into the left hand Directory Opus window we would use:

```
'Status 13 0 set Work:datafiles' /* set left window
and read dir */
```

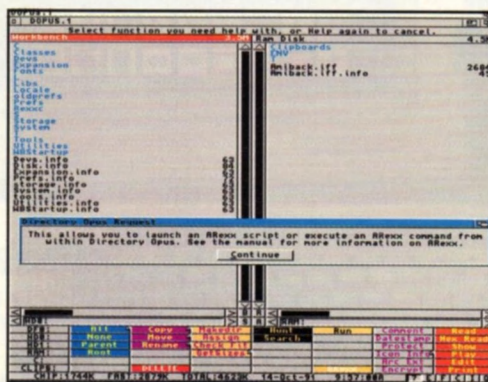
These types of facilities can be used for setting up many different automated ARexx-based backup and file management operations. If, for example, you wanted to produce a button that would format a new disk, set it up as a copy destination disk, read a set of directories and datafiles from some specified source, and then copy those files and directories to the new disk you could do it like this:

```
/* Directory Opus example */
'Format drive df0:' /* format disk */
'Status 13 1 set df0:' /* load to right window */
'Status 13 0 set Work:datafiles' /* set left
window and read dir */
'All' /* select all source files and dirs */
'Copy' /* copy source to destination */
```

Having written and saved the script, you then go to the Directory Opus configuration screen and select the 'Buttons' gadget. This presents you with a button bank display from which you can select an unused custom button, give it a suitable name, adjust the button colours and then identify it as an ARexx script driver (specifying the appropriate script filepath and filename). Once the new definition is saved your ARexx script will run automatically when you hit the chosen button.

Directory Opus also allows ARexx scripts to be run automatically at startup, at return from the program's 'iconified' state, or after return from the program's configuration utility. Although there is nothing which Directory Opus can do that cannot be done via the Shell or other means, the program is attractive and clearly offers some real advantages as far as easy 'file house-keeping' is concerned.

## This month Paul Overaa examines two ARexx compatible programs: Directory Opus and Ami-Back.



With Directory Opus ARexx provides the icing on the cake.

## ami-back

Ami-Back, the Amiga hard disk backup program from Moonlighter software, is another program that offers ARexx control facilities. The program is put into rexx server mode either by using the REXXSERV tooltype switch or via a Shell command line argument and either way the result is the same, the Ami-Back program loads and then waits for ARexx commands before performing operations. To communicate with Ami-Back it is necessary to set the current host address to AmiBackRexx. Before doing this the script must wait for the port to be created and there is an example script provided on the Ami-Back program disk which waits using this type of code:

```
do while ~SHOW(Ports, AmiBackRexx)
  nop
end
Address AmiBackRexx
```

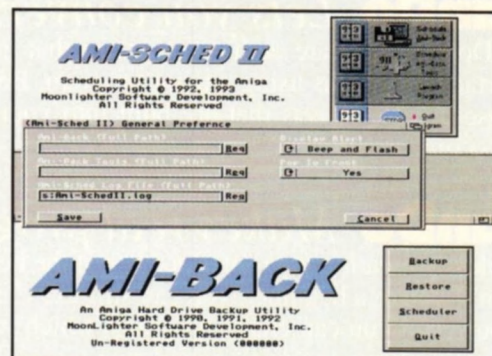
It's worth mentioning that, because this code effectively involves a 'busy wait' loop, it is not actually the best approach. Nowadays there is an ARexx WaitForPort program which causes a script to effectively sleep (and therefore not use any processor time) until the specified port becomes visible. Typical command usage looks like this:

```
address command WaitForPort AmiBackRexx
Address AmiBackRexx
```

Only four interface functions (BACKUP, RESTORE, LOAD and QUIT) are supported, but this doesn't matter because Ami-Back is controlled by a configuration file and of course any number of different configuration files can be set up and stored. In practice then you set up Ami-Back to perform the various different types of backup operations

required, saving a configuration file for each arrangement. Scripts can then use the LOAD command to bring in the configuration file appropriate for the job being performed. A typical backing up script, which in practice ought really to include some additional error handling code, might look like this:

```
/* Ami-Back example */
options results
address command 'run ami-back20 rexxserv'
address command WaitForPort AmiBackRexx
Address AmiBackRexx
load 's:Ami-Back.config_A'
BackUp
Quit
```



Ami-Back has a simple, but effective, ARexx interface.

The current Ami-Back documentation states that AmiBack's ARexx port name is AmiBackRexx. This is wrong - the name is actually AMIBACKREXX, but in the above script the uppercase port name gets used anyway (since an uninitialised variable is being used to define the name and such variables are initialised by default to uppercase variable name strings). Problems would however occur with scripts that used real, case specified, portname strings because ARexx's port names searches are case sensitive. If, for instance, the WaitForPort command line in the above script was written like this:

```
address command WaitForPort 'AmiBackRexx'
```

the port name string would be transmitted as AmiBackRexx (rather than AMIBACKREXX) and this would cause the script to fail, since the port would not be found. In such situations the port name would need to be explicitly defined as upper case. **a**

**Next month we shall be looking at the ARexx facilities provided with Quarterback and Quarterback Tools!**



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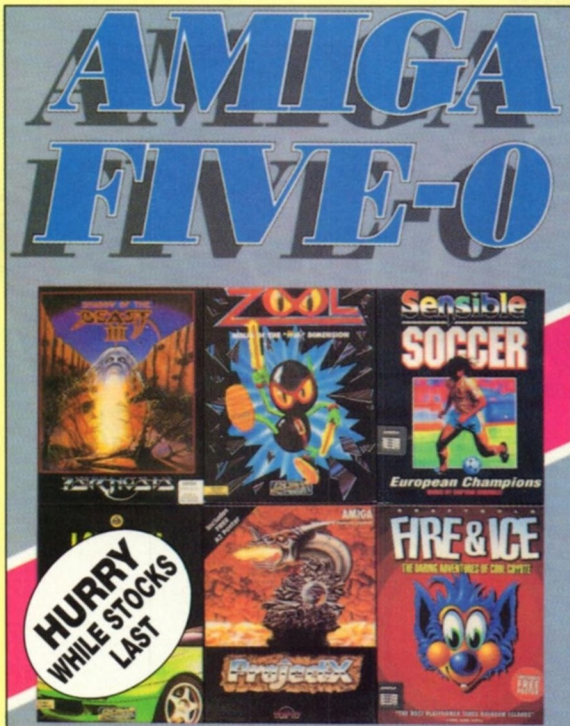
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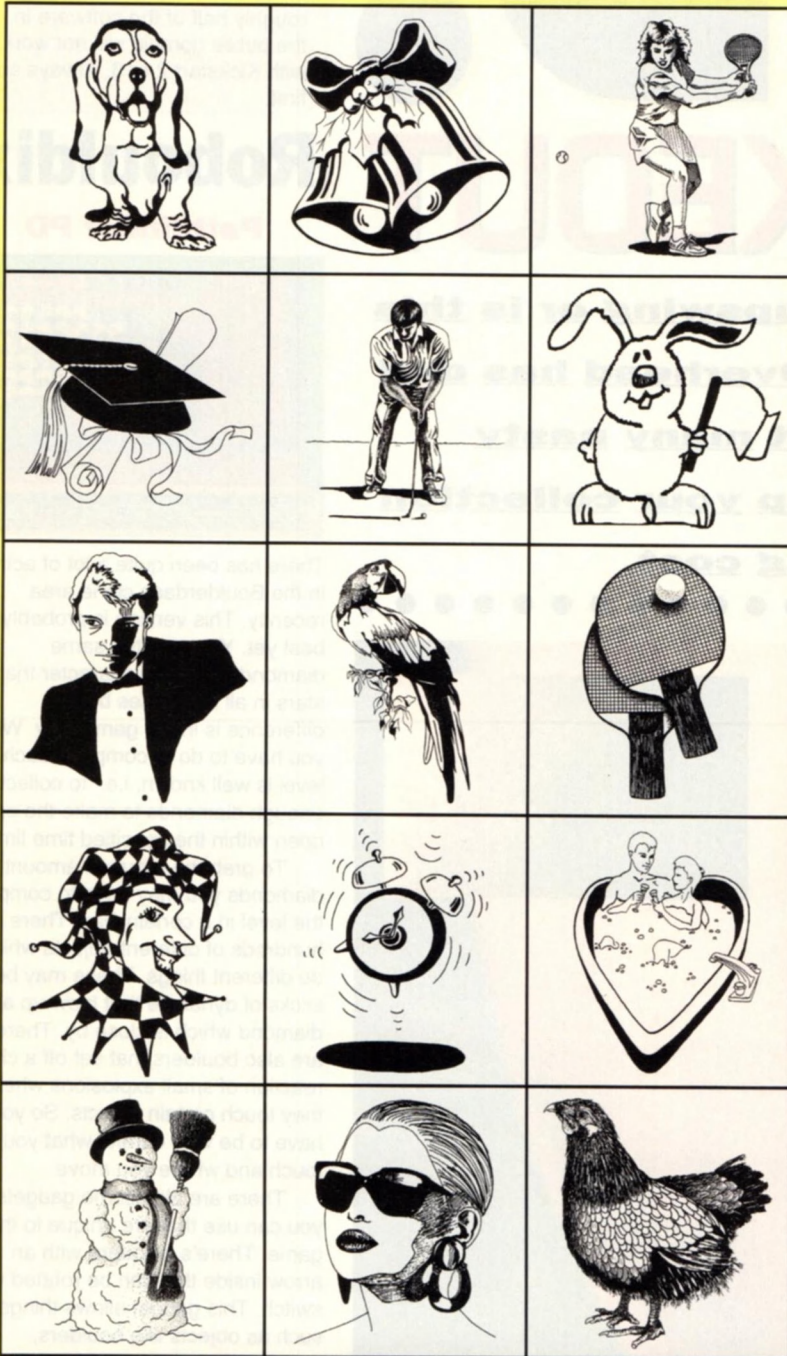


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Christmas	Music 2	vol 441	Trees 2	vol 541
Festivals				



## Scoring

The marks awarded to each PD disk are based purely upon its own merits and, of course, our personal views. Value for money and reliability are also taken into account as well as features and quality of the software.

# The P.D. STAKEOUT

**Is the Public Domain on the upswing or is this just a good month? Gideon Overhead has dug out loads of nifty and not many nasty programs to help you build up your collection at a next to nothing cost.**

## Visit to the Red Planet

Roberta Smith

This nice little slide show is both entertaining and educational. It is run via a program called The Projector which allows text to be overlaid on to pictures. This works most of the time but because these pictures are in Ham interlace, fringing does occur.

The pictures themselves are of quite high quality and contain considerable detail. It is a shame that no music is present as you watch the show. If there were something playing in the background that was atmospheric enough, it would enhance what is happening on screen.



7/10

## Is it PD or SHAREWARE?

All freely distributable software comes under the rather deceiving umbrella of "public domain". Quite a lot of this software is, in fact, Shareware. Shareware means that if you like the software, or use it regularly, the author will request a reasonable donation from £5 to £20. There is usually a note on the disk informing you if the software is shareware

or regular PD. Whether or not you send a donation to the author depends totally upon your level of conscience and morals. Remember, if you send a donation to the author, you may receive an updated version of the software. Even if you don't receive an update, you will have given the author the incentive to continue contributing to the public domain.

## Compatibility

The PD disks reviewed in this issue were tested on an A500 with Kickstart 1.3. Please check with your PD supplier that the disks you are ordering are compatible with your Amiga. Amiga Plus, 600, or 1200 owners should be aware that roughly half of the software in the public domain will not work with Kickstart 2 or 3. Always ask first.

## Robouldix

Pathfinder PD



There has been quite a lot of activity in the Boulderdash clone area recently. This version is probably the best yet. You play the same diamond collecting character that stars in all the clones but the difference is in the game play. What you have to do to complete each level is well known, i.e. to collect enough diamonds to make the exit open within the specified time limit.

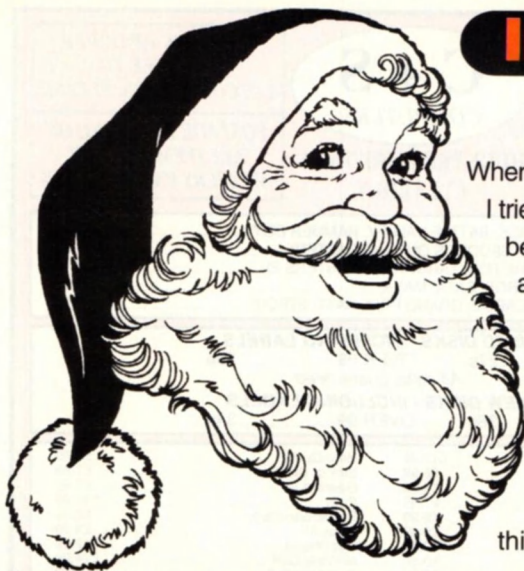
To grab the required amount of diamonds you may have to complete the level in a certain way. There are hundreds of different objects which do different things. These may be sticks of dynamite that blow up any diamond which is close by. There are also boulders that set off a chain reaction of small explosions when they touch certain objects. So you have to be very careful what you touch and where you move.

There are also some gadgets you can use that are unique to this game. There's a square with an arrow inside that can be rotated via a switch. This gadget allows things, such as objects like boulders, monsters, or even you to pass through them in the direction in which the arrow is pointing. This is useful if you want to kill one monster at a time.

This is an excellent game but the bad news is that this is the demo version and only contains 6 levels. The full registered version is available from the programmers in Sweden, but costs £18 which seems a bit steep. Still plenty of work probably went into it and the labourer is worthy of his hire, isn't he?

9/10





## Images of Christmas

**Disk ACCA002**  
**Roberta Smith**

When I received this disk which was classed as a graphic utility, I tried to figure out what it was to be used for. If booted, it becomes a slide show displaying 51 pictures of varying size and resolutions. These are clip art line drawings.

After a while I thought they would be very simple to print out and could make excellent Christmas cards. Some of the drawings are huge; there is a picture of Father Christmas that has a resolution of 1168X1272! If you want something for your Season's greetings cards... this may be it.

**7/10**

## Artistix

**Disk E37**  
**NBS**

This fun paint program is aimed at kids, but it is great for adults to play around with too. Well, I enjoyed it anyway. (No comment! ED) The reason it is so much fun to use is its numerous effect buttons which each make a different pattern. All the effects have a different name from Butterfly Effect to Rainbow Explosion.

Artistic is also very smooth when actually drawing on the screen, and doesn't suffer as some other paint

programs I could mention which lag behind the user.

Every time you click on an icon a sound is heard. This can get a bit irritating after a while, but hey, that's what the volume control is for!

There is an interesting brush menu which contains several different types of leaves and flowers which can be dragged onto the screen and used to make a garden if you so desire. If you have a young child and an Amiga, this program

will give him or her hours of entertainment. This version is an evaluation copy and a few of the features have been disabled including save. The registered version will cost you five pounds. A bargain.

**8/10**



## Abstrax Pig

**Disk D866**  
**NBS**

There haven't been as many 1200 demos released as one might have expected. When the 1200 came out a lot of people thought "Ooooow, a new faster Amiga which is 32 bit and has a AA chip set, those demo makers will have a field day". This has not happened to the extent that people had anticipated it would.

Apparently the new Amiga's blitter is no better than the A500's and so the demo makers won't be able to create those amazingly fast vectors that they were hoping to.

Still this particular demo is very good and starts off with a wonderfully rendered HAM8 picture which appears and then very slowly and smoothly fades out, an effect which just oozes quality. Other parts include a real-time AGA cycling fractal, generated in real time and a mutilated Brilliance picture in which all the fish are animated. Nice work.

**8/10**

## Picture This

**Disk CU091**  
**Roberta Smith**

This disk contains eight graphic utilities, some of which are new, others rather old. For grabbing pictures of DOS programs in the **AUI** office, we often used a renowned program from Discovery Software called Grabbit. (Whatever happened to erstwhile Discovery boss, Rick Ross who brought the Sword of Sodan to the world too? Anyone heard of him recently?)

Now an easier to use P.D. program called QuickGrab takes its place. That and several other screen grabbers appear on this disk, along with a number of other graphic utilities including one called ColorCatch which is very interesting. This program captures the colours of the front screen, and saves them as an executable file. This could be useful if you have managed to grab a picture but for some reason the colours are scrambled.

ColorCatch could save your day!

**6/10**



## Kungfu Charlies

**Disk G353**  
**NBS**

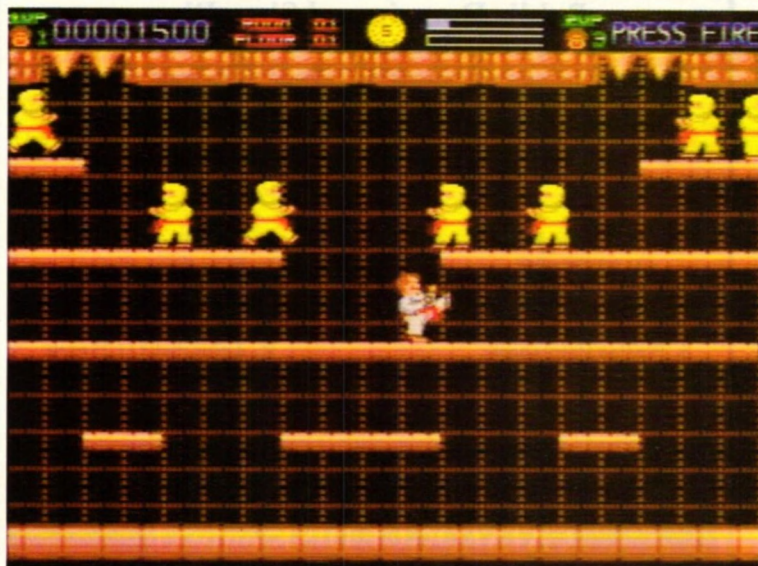
Kungfu Charlies is a scrolling platform game with the strange mixture of humour and extreme violence. This is version one which has 3 floors in which there are 100 rooms. Version 2, which you have to register for, contains 10 floors.

The graphics are very cute and it is quite playable. You can probably guess what you have to do, get to the top of the building to the last room and kill the bad guy. Wow! What a surprise!

When you make any kind of offensive move you can hear that the samples have been taken from IK+ and the sound of you dying has been ripped out of Rick Dangerous.

Kungfu Charlies is enjoyable to play for a few levels but does become repetitive after a while.

**8/10**





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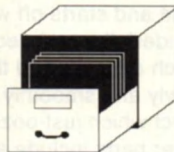
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# The pd user port

Stakeout

## Beat Artists

### Issue 4

One of the best disk magazines by far is Grapevine as it is very well presented with fabulous music and graphics. Beat Artists on the other hand has not achieved these things I am sorry to report. Hang on a minute though, this is a disk magazine, isn't it? That means you buy it to read text articles. In that case Beat Artists wins and Grapevine loses.

Grapevine has about 200 articles but most of them are inane prattle about ten things not to do while sitting on the toilet or other such rubbish.

Beat Artists magazine, however, contains genuinely interesting articles which are well researched and written. The graphics are very basic and are all simple DPaint efforts. It comes on two disks but the second disk is full of programs. These are on whole not that impressive and could have been left out, saving on disks. If that had been the case this would have been a brilliant magazine. But even as it is, it seems quite good for anyone interested in intelligent material.

7/10



## Trax

Disk CLG40  
NBS

Trax is not the tank game we included on our cover-disk but is, in fact, a bandit style game. Once you start the game you are presented with four tracks which you must advance along by getting certain scores on a fruit machine. As you progress you will encounter several other games to play which must be completed if you are to continue.

These games include Higher or Lower, Pong, which is a simple football game, and Dice, in which

you have to predict if the total of the score of three dice will be either odd or even.

Trax is a good idea in theory but is let down by poor game play and graphics. The whole play area is in one large block which constantly scrolls up and down very slowly and soon becomes tedious. If you can live with this you will probably find Trax fun to play.

But then again, some people like Tiddley Winks.

6/10

## Spar Trek

Disk H746 NBS

I had a horrible feeling this animation was going to be a parody on Star Trek and I hate it when people make fun of this TV series (I admit I am a big fan). I can rest easy though as this, strange as it may seem is an advertisement, be it a short one, for The CD32. It combines animation with samples to give both an amusing and clever 35 seconds of entertainment. It's clever because the person who wrote this has extracted samples from a Star Trek episode (The Ultimate Computer, for all you Trekkies out there) in such a way that it actually tells a story. The speech goes something like this:

SPOCK: Captain I found this device on my console.

Cue picture of CD32

KIRK: The most ambitious complex ever created.

SPOCK: Fascinating, Doctor, this computer has a potential beyond anything you've ever done.

McCOY: Looks like we finally found the right computer.

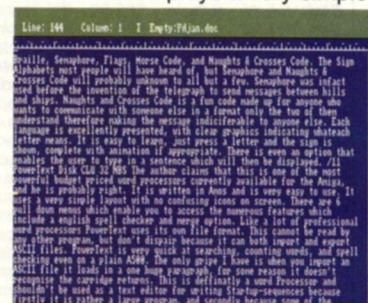
The animation is limited due to the size of the samples and the graphics are not too good, but it is still worth a look. Especially for us Trekkies...

7/10

## PowerText

Disk CLU 32  
NBS

The author claims that this is one of the most powerful budget priced word processors currently available for the Amiga and he is probably right. It is written in Amos and is very easy to use. PowerText employs a very simple



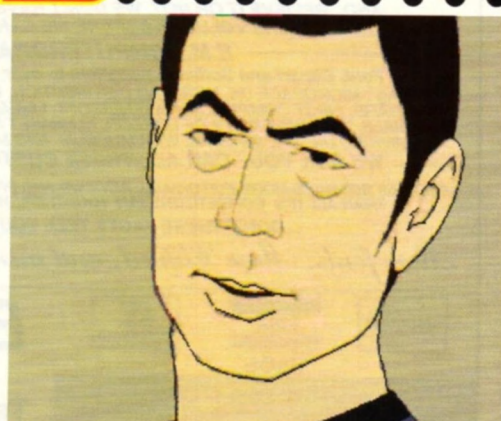
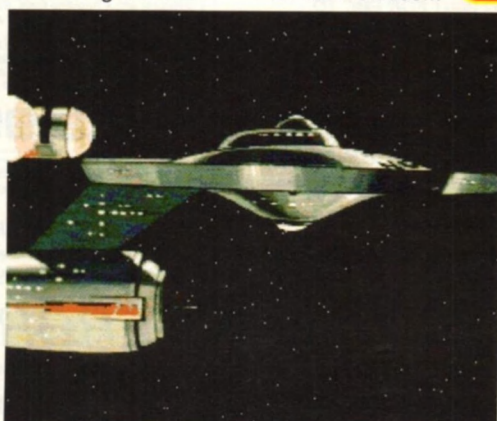
layout with no confusing icons on screen. There are 6 pull down menus which enable you to access the numerous features which include a English spell checker and merge option.

Like a lot of professional word processors PowerText uses its own file format. This cannot be read by any other program, but don't despair because it can both import and export ASCII files.

PowerText is very quick at searching, counting words and spell checking even on a plain A500. The only gripe I have is when you import an ASCII file it loads it in as one huge paragraph, it doesn't recognise the carriage returns.

PowerText is definitely a Word Processor and shouldn't be used as a text editor for writing Startup-sequences because firstly it is rather a large program and secondly because some of the features get in the way. However, for a non-commercial program PowerText has a very professional feel.

8/10





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- ☐ Alchemy (2)
- ☐ How To Skin A Cat
- ☐ Bait Masking (2 Meg)
- ☐ Quality Time (5 Meg) (4)
- ☐ Speed Limit (2 Meg) (3)
- ☐ Dolphin Dreams
- ☐ Lethal Exit
- ☐ The Wall (6) (2 drives)
- ☐ Wicked Sensation (2)
- ☐ Keftend Dame
- ☐ Mayday Resistance
- ☐ Technological Death
- ☐ 2 Unlimited (2)
- ☐ Boundless Void
- ☐ Alpha & Omega 2 (3)
- ☐ Extensions
- ☐ 242 Demo (needs fast ram)
- ☐ 3D Demo 2
- ☐ HardWired (2)
- ☐ The Invisible World
- ☐ Capri Slideshow (2)
- ☐ Ghost Pool
- ☐ My Tin Toy
- ☐ Thunderbirds Music (2)
- ☐ Led Zeppelin Guitar Solos
- ☐ Spaceballs Mobile
- ☐ Sound Of Silents
- ☐ Neural Assault
- ☐ Hoi Mindwarp (1200 only)
- ☐ Snow Joke

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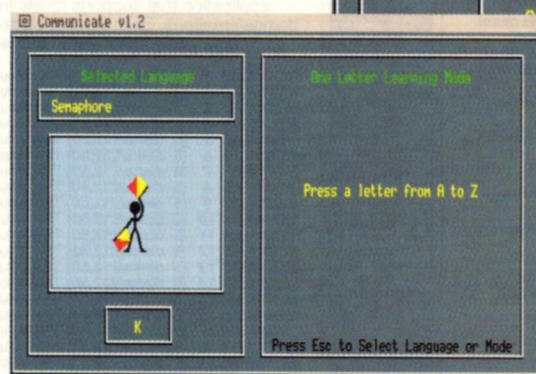
# The pd user port Stakeout

## Communicate

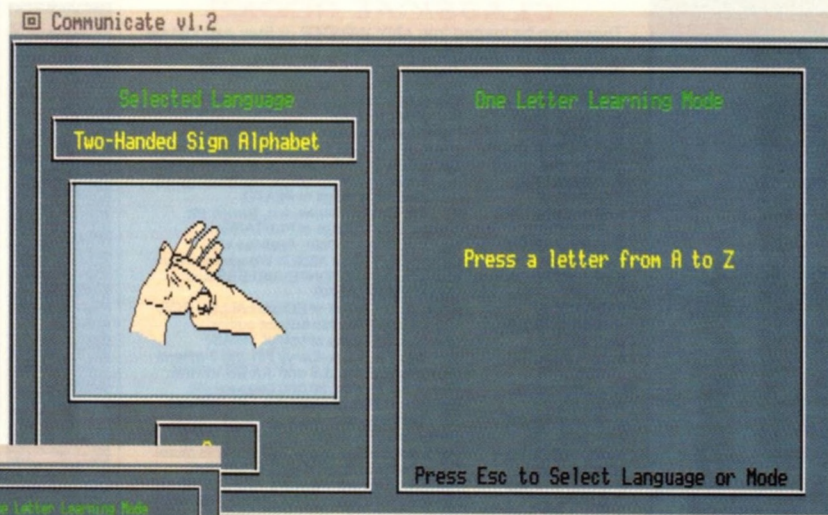
**John Cassar**

This is an excellent disk for all of you who are interested in learning about other forms of communication than the spoken or written word. Written in Amos, this program sets out to teach you the alphabet of eight new languages. These are Two Handed, One Handed, and Deaf-Blind Sign Alphabet, Braille, Semaphore, Flags, Morse Code, and Naughts & Crosses Code.

The Sign Alphabets most people will have heard of, but Semaphore and Naughts & Crosses Code will probably be



unknown to all but a few. Semaphore was in fact used before the invention of the telegraph to send messages



between hills and ships.

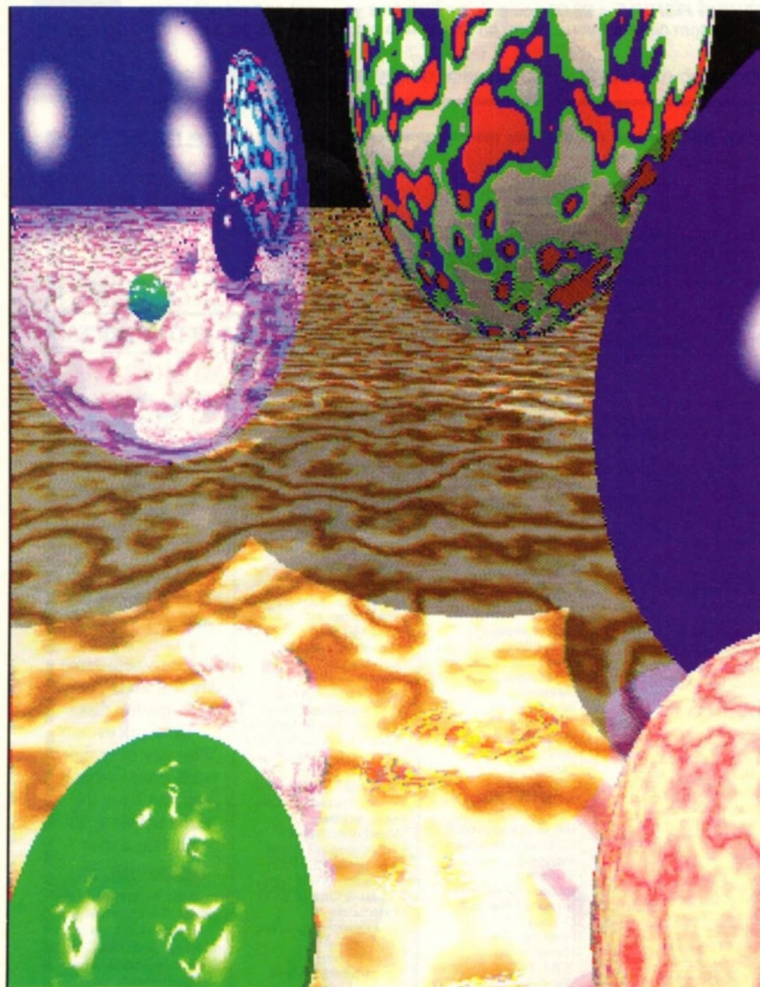
Naughts and Crosses Code is a fun code made up for anyone who wants to communicate with someone else in a format

only the two of them understand, therefore making the message indecipherable to anyone else.

Each language is excellently

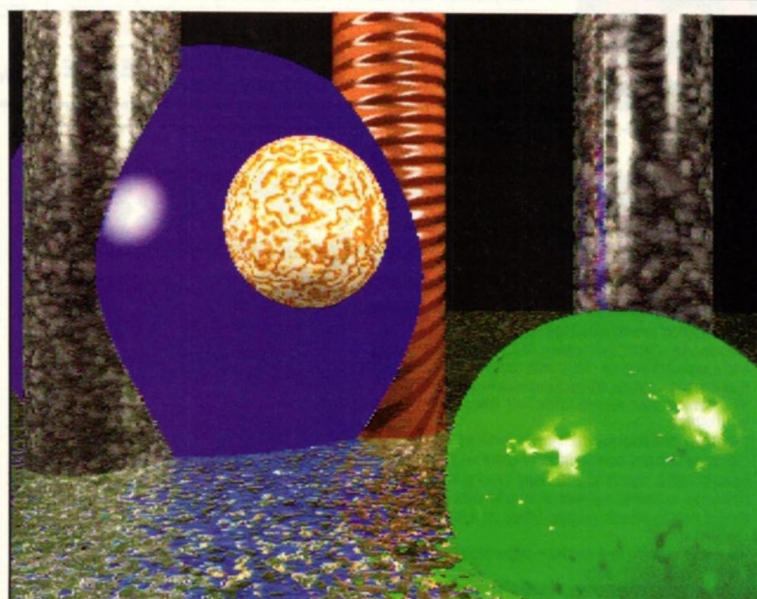
presented, with clear graphics indicating what each letter means. It is easy to learn, just press a letter and the sign is shown, complete with animation if appropriate. There is even an option that enables the user to type in a sentence which will then be displayed. For those who have a hunger for new knowledge this is a fascinating program.

**8/10**



There are not many ray tracing programs in the public domain, but of the few that exist DKBTrace is the most well known. It is capable of some stunning results as

displayed on these two disks. All the pictures are in low res Ham and show simple objects such as spheres and cubes, but the odd tower does pop up now and again.



## DKBTrace Slideshow

**Marco Steret**

There are some wonderful texture and reflective effects which are made even more impressive as you learn that all these pictures were created on an A500. It must have taken ages for them to be rendered.

At the moment these disks are only available from Marco himself and he is wondering whether he

should release them into the PD or not.

The only minus I found is that the pictures are too simple and too many of them look the same to keep people interested for long. I would have put the best ones onto a single disk.

**6/10**



# Amiga Productivity Series

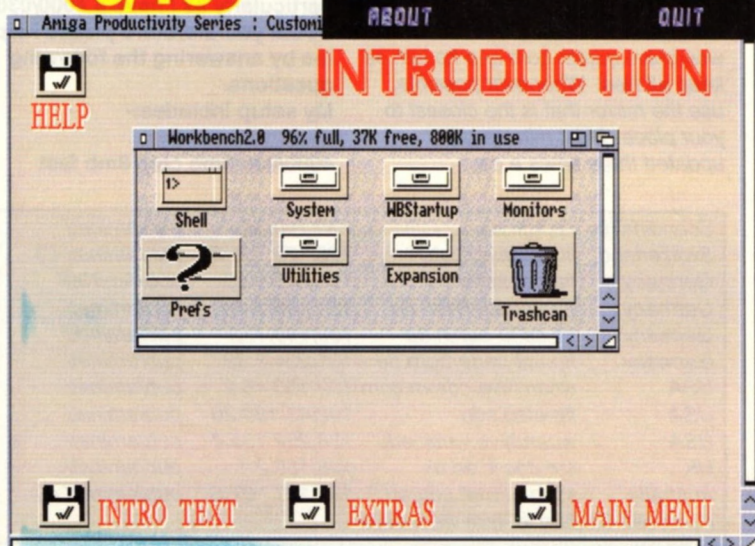
**M.J. Docking**

The Amiga Productivity series of disks is an introduction to the way the Amiga works and the different programs available to it both PD and Commercial. The first two disks entitled Customising Workbench take you step by step through the process of making your Workbench Disk work for you. Showing you how crunch files with Powerpacker (supplied) therefore making room for even more programs. It also informs you how to use Preferences and tells you how to customise icons, shells, and menus.

The second two disks in the series are called Graphics and sounds. These tell you all about different types of paint programs, 3D modelling, digitising and sound samplers.

The Amiga Productivity Disks are very well put together. They are certainly well worth getting if you have just bought an Amiga and want to learn both about the different types of software available and how to get the most out of this wonderful machine.

**6/10**



## Delos RuneCaster

**CLE 50**

From the programmer that brought you The Complete Amiga Tarot Translator, now brings you The Delos RuneCaster. Yes, now you can



predict your future through casting of runes. Of course, that's what you've always wanted to do, isn't it?

Runes? They are a set of stones or cards, as stones are just a bit too heavy to lug around nowadays.

Funnily enough rune casting originated with the Vikings; you wouldn't think



they had time to invent anything what with all that raping and pillaging they were doing. (Fancy a bit of rune casting this

evening, Elfrod? No, thanks, Lars, I'm on raping and pillaging duty tonight. Next Thursday perhaps.)

Unlike other types of future predictors runes are not considered part of the occult, they are simply symbols of an ancient alphabet that originated among the Nordic peoples of Europe, probably

two or three centuries before the Christian Era.

It would take too long to tell you about all the functions and different ways of using the program but suffice to say that each rune tells a story and there are text files to explain what everything means. So I won't rune it by telling you...

RuneCaster is written in Amos and will need 1.5 Megs to run. It is Registered Licenceware which means that any PD company that stocks CLR software should have this program.

**8/10**

### CONTACTS FOR PD REVIEWED IN THIS ISSUE

Roberta Smith DTP (PD)  
190 Falloden Way  
Hampstead Garden Suburb  
London NW11 6JE  
Tel: 081 455 1626

John Cassar  
31 St. Mungo Ave  
Townhead,  
Glasgow G4 OPG

Beat Artists (£2.50)  
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Leicester,  
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### If you have created a masterpiece

and you would like it reviewed here or if you own a Public Domain company and want to contribute new and interesting PD, please don't hesitate to send it in. The address is:

The PD Stakeout  
**aii**, 48/52 George Street,  
London W1H 5RF



# amiga answers

## APPS

Dear **auri**

Please help! I am a very new and completely baffled Amiga user. I have an A600 floppy drive, one external drive and a 9-pin printer.

I want to use my Amiga for wordprocessing/desktop publishing, particularly to type up coursework in Spanish, but I was not getting very readable type with Transwrite - in particular, foreign accents were not printing well as the type was so small.

I wanted a range of fonts and type sizes and decided to go for a DTP package rather than a better wordprocessor. I bought Pagesetter3. When I tried to run its installation disk, it would not copy its fonts on to my Workbench disk or update the fonts supposedly already there - it kept telling me 'dest: string argument expected' or 'DOS error, Could not find CG:Fonts'.

I spent a very long time searching through the Workbench manual for information about where my fonts should be, but got nowhere. Neither does this manual explain the fonts disk that comes with Workbench (but then, it does not explain a great many things). The PS3 manual does not seem to mention fonts. I took PS3 back to the shop. They got it running, but on a hard drive A600 and they did not know why I was having problems. I tried their phone support line - they did not know either.

Is there a way to get this program to run? And is there perhaps a book or manual that will help me to learn more about how to use the Amiga? The manuals that come with the machine and its software have left me utterly bewildered!

Gillian Gould  
London

Dear Gillian,  
Running PS3 on a floppy based system will be rather painful, but it should be possible.

I have found that there is an error in the installation script for

Pagesetter. It is very simple to correct, but PLEASE only work on backups!

You will need to work on the INSTALL DISK. Do not use a Word Processor for this job, use ED.

Load the file  
Floppy\_Drive\_Setup into ED.

At approx. line 200 you will find a header like this.

```
*****
; Update if.ss file
*****
```

There are two blocks of text after this. It is the second block that is the problem. Look for the lines ending with:

```
(dest cg_dest))
(dest rambuffer))
(dest rambuffer))
(dest rambuffer))
(dest rambuffer))
```

The first line is correct, but the lines following with the word rambuffer are incorrect. Change rambuffer to read cg\_dest and all will be well.

Save the file and then try the install program again. You should find that it will work now.

## COMMS

Dear **auri**,

I thought that you would be the best to ask concerning Aminet sites. Where are the best ones? Are there any other (ie: not Aminet) sites I could try too? I'm generally looking for the latest applications and good quality images.

Hope you can help,

John

Dear John,  
Congratulations, yours is the first Amiga Answers letter to be sent to us by email.

There is a problem with internet sites, they do change from time to time, so it is well worth keeping an eye on some of the Amiga related newsgroups for specific announcements.

There are several sites that I would try first.

## Answer Types

### APPS

Programs etc]

### VIDEO

Video related problems

### COMMS

Communications

### PROG

Programming

### OS

Operating System

### PRINT

Printer Problems

### OTHER

For anything else

wcarchive.cdrom.com  
[192.153.46.2]

This is a very good site, supported by the people who produce the Walnut Creek CDrom)

ftp.luth.se [130.240.18.2]

Has a large Amiga section, this site took over from Physik when it closed (due to some rather stupid behaviour by some users so I understand)

wuarchive.wustl.edu  
[128.252.135.4]

This is a BIG site that caters for all sorts of machines and is a good general source of information.

AmiNet is also 'mirrored' at the following sites:

These are the members of Aminet and have the files from here. Most delete old files. However, wuarchive.wustl.edu, wcarchive.cdrom.com and ftp.luth.se keep all files. Whenever possible, use the mirror that is the closest to your place. Most mirrors get updated three times a day.

Scandinavia	ftp.luth.se	130.240.18.2	pub/aminet/
Switzerland	litamiga.epfl.ch	128.178.151.32	pub/aminet/ (*)
Germany	ftp.uni-kl.de	131.246.9.95	pub/AmiNet/
Germany	ftp.uni-erlangen.de	131.188.1.43	pub/aminet/
Germany	ftp.cs.tu-berlin.de	130.149.17.7	pub/aminet/
Germany	ftp.uni-paderborn.de	131.234.2.32	pub/aminet/
USA	wcarchive.cdrom.com	192.153.46.2	pub/aminet/
USA	ftp.etsu.edu	192.43.199.20	pub/aminet/
USA	wuarchive.wustl.edu	128.252.135.4	pub/aminet/
UK	src.doc.ic.ac.uk	146.169.2.1	pub/aminet/
Australia	splat.aarnet.edu.au	192.107.107.6	pub/aminet/ (*)
(*) closed 6:30am to 4pm weekdays			



There are hundreds of sites that you can 'visit' but remember, you may not pay for the service but it is NOT FREE. Much of the disk space is a concession given by the owner of the computers, as is the bandwidth on the leased lines connecting the machines together. Please don't use the services inside normal working hours, REMEMBER THE TIME DIFFERENCE! 10 p.m. in the UK is 10 a.m. in Australia and that will be a peak usage time for them.

Give your email address when asked for and if you don't get a connection, don't keep on trying and trying, the system might be overloaded and has had to be closed down, or a part of the internet may be down. Internet is a wonderful resource and the good will of the system providers is essential if we are to continue to enjoy it.

## O/S

Dear **auri**

Although you carried out a review for the Commodore PC 386 Bridge board last October, I still have a number of questions, particularly as I have a 4000/030. Could you therefore please help me by answering the following questions.

My setup includes:-

4000/030 2mb chip 8mb fast



2 IDE drives - 120mb & 80mb  
 1 Internal HD floppy drive - DF0  
 1 external DD floppy drive - DF2  
 1 CBM 1 942 Monitor

1. Assuming I add a VGA card, what connections have to be made?
2. Will the Bridgeboard performance be better than if installed in a B2000?
3. How much memory will I need to run Windows and can the Amiga memory be utilised?
4. Will I need another Monitor besides the 1942 to run PC VGA programs?
5. If not, will I need a switchbox of some sort and if so, why?
6. To get the best out of the second Hard drive for PC use, what do I need to do?
7. Do I need to make any ribbon connections to the floppy drives?
8. Trying to anticipate some of your answers, is it worth going to the trouble with a 396/486 Bridgeboard as opposed to using the brilliant KCS Powerboard?

J.J.Cowley  
 Leicestershire

Dear J.J.Cowley.

1. No connections at all, the VGA card will pick up everything it needs from the AT bus connectors. That's why the Bridgeboard gets its name, it bridges the Amiga bus and the AT bus.
2. The Bridgeboard is a separate computer and as such is unaffected by the Amiga system. However some support programs will run faster in the 4000 than in the 2000.
3. The Amiga memory cannot be used, they are two different machines. Windows needs lots of memory; I would say at least 4 Megs.
4. The 1942 should work on the VGA side of things.
5. You will need a switch box to switch the monitor from the Amiga to the PC side of things.
6. Get a PC hard disk controller and use the hard disk on that. That is the fastest way of doing things. You can set up a virtual drive, but as that has to go through the bridge, it is rather slow. This may be OK for you, as it depends on what applications that you want to run on the PC.
7. Amiga (internal) floppy drives are not usable directly on the Bridgeboard side. You can plug an external drive into the back of the bridgeboard however.
8. Depends on what you want. I have no real preference apart from the fact that it may be better to buy a cheap PC system rather than the Bridgeboard/KCS system if you have the space for

it. The Bridgeboard is a full PC on a card that will happily work on PC tasks while the Amiga gets on with Amiga tasks. If you want to do this sort of thing then fine. However, if you don't want to use the Amiga while you are using the PC then the KCS may work out better. Look very carefully at what you want to do. I have been happily using the Amiga for years without the Bridgeboard (I have an old XT bridgeboard knocking about somewhere) but I have been using CrossDos to move files between the Amiga and PC systems that I have to use without any problems at all.

O/S

Dear *au*,

We bought a Amiga 500 about last year, and we had a bit of a problem getting it to work. We also bought a Dot Matrix 24 printer DMP 921 and a Commodore Monitor 1084S, to get to the point:

We are having a lot of trouble with it at the moment; I also use it for St. John Ambulance. When you put in the Workbench 1.3 you can open up windows and use some of the icons, such as Notepad and save but when you come to use the rest it all starts to go wrong.

I have listed most of the problems with this letter such as: Open up AmigaDOS: reply error on source disk cannot open AmigaDOS Device. Copy DF0:c/copy Ram: reply Unknown command [Bad Argument] Format: reply Failed because error 541354355 Dir DF0: reply Please insert volume DF0. Followed by could not get information for DF0 device [or volume not mounted] List DF0: reply cant examine DF0: object not found Copy DF0:C/CD Ram : Message please insert volume DF0 in any Drive DIR RAM: RAM not found. SETCLOCK COMMAND. Reply unknown command COPY: reply bad argument DISKCOPY: reply command did not set a return code COVERDISK: Workbench 1.3 will not take them, top left corner box, insert volume *auixx*, shell instructions when all else fails, October 1993, failed this command.

I think there is something wrong with the Workbench 1.3 and the Extras 1.3.3 as well because when you put this disk in it as a read/write error comes up in the small box in the left hand corner - error validating disk.

As you can see, I can use the printer, but only plain print comes out onto the printer. I have set the printer preferences to the correct driver EpsonQ, but I still can only get plain writing.

I am just about to pull out my hair! Can you help me PLEASE before I go mad? We have spent over £1,000 on Amiga for our son, because we were told it was the best.

J.H.Morgan  
 Gwent

Dear J.H.Morgan,  
 I very sorry to say this, but apart from one thing I cannot make head or tail of your letter.

You have tried to be very helpful, but I think mainly due to your lack of knowledge on the Amiga you have not really told me what is going on.

You have listed commands that are AmigaDOS commands and that are normally only used from the CLI or Shell windows. What EXACTLY were you trying to do?

I also need to know a little about your machine. I know you have an Amiga, but what else? Such as memory, extra drives, etc.

The only thing that I can say for sure is that you have a problem with your Workbench disks. A validation error means that AmigaDOS has detected a problem with the data on the disk. These forms of problems are normally caused by taking the disk out of the drive before the Amiga has finished writing to the disk. It is always a good idea to count slowly to ten before removing a disk to allow the Amiga time to tidy things up.

The solution is easy. Just make a new set of Workbench disks from your original master set that you should have put away somewhere safe. If you are using the original disks as a working copy, well that is just daft. You will have to contact your dealer (who may copy a new set of disks for you, or get a new set from CBM)

PLEASE EVERYONE, ONLY EVER USE BACKUPS AS WORKING DISKS!

If you would write in again telling me exactly what you do when things go wrong, I may be able to help you with your other problems, for which there could be several different reasons. Don't pull all your hair out just yet, give me a little more information to work with and I sure that we can crack the problems that you are having.

The Amiga IS a very, very good computer, just about the most advanced home computer that it is possible to buy. I use Amigas for all of the work I do for *au* and much of the production and typesetting of *au* is done on the Amiga. If we can use it for that professional work, you can surely use it for whatever you want to do.

O/S

Dear *au*,

I have an Amiga 500 + and I want to utilise my MPS 801 printer that I once used with my Commodore 64. I've been advised that an interface is possible but I'd be obliged if you could tell me how reliable it will be, where I can purchased it and at what cost.

T.S.Glassford  
 Glasgow

Dear Mr Glassford,  
 You are quite correct in that an interface to connect C64 devices to the Amiga is available. It is made by:

York Electronic Research  
 The Paddocks  
 Jockey Lane  
 Huntington  
 York  
 YO3 9NE  
 Tel: 0904 610722

The product is called the Ami-64-Link and comes in two versions. The cheaper budget version stops multitasking during printing; the standard unit does not.

As for reliability, well, York have been in the Amiga business for quite a few years. I remember reviewing the original C64 link which utilised the C64 as a printer driver!. That worked very well and many people made use of it. The new units do not require the C64, so are somewhat more compact. I've not seen anyone complaining about the YER interface.

The interface works with MPS, DPS, VIC, Star, Brother, Seikosha and Citizen printers. It also provides for graphic output as well. The quality of output will depend on the printer, The MPS801 was not a high quality dot matrix printer by any means, but you should get at least as good an output as you did with the C64.

The prices:  
 Standard Ami-64-Link £35.25 inc vat + p&p  
 Budget Ami-64-Link £23.50 inc vat + p&p

OTHER

Dear *au*,

I own an Amiga 500, running WB 1.3, upgraded to 1 Meg with a second drive. I would like to ask a couple of questions.

1. I have noticed that some companies are offering the Super Denise 8373 chip for sale. Would it be possible for me to utilise this in my 500?
2. I do a lot of artwork using DP III and a Swift 240 printer. I was thinking of getting a hard drive to



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disappointment - we try to keep most items in stock unlike some of our competitors and will gladly post items aside for you to collect, but shortages of some items do occur from time to time.

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# ← amiga answers ?

save my art on, what size would you recommend?

3. I used to do a spot of machine code programming on my old speccy. I have a little knowledge of the 68000 but it seems a little more complicated. Which books would you recommend?

Finally, on trying to decrunch Superdisks *aii* 25 and 26 I get a message saying "Needs ARP.Library" I've looked for this in the libs of the Superdisks and Workbench 1.3 but to no avail, where is it?

Craig Bowman  
Durham

Dear Craig,  
Some Amigas can make use of the Super Denise, but DON'T go rushing into things without careful thought. Are you having chip memory problems? If not leave well alone, it is not worth the expense. If you are having problems, an upgrade will help a little, but with only one Meg of RAM. I expect that you will be running out of memory generally rather than just the chip RAM. Consider a further memory upgrade.

Hard drives... the general answer to this is as big as possible. I used to say 20Megs, but nowadays 80Megs is more common. One thing is for sure, you will soon fill whatever size hard drive you get!

Remember to consider the backup implications of owning a hard drive as well.

The machine code series in *aii* that Paul Overaa wrote is as good a place to start as any. For general use I happen to like the style of an author named Dr Lance A. Leventhal, who normally writes for McGraw-Hill. His Z80 book was very good, and he wrote a 68000 book with Doug Hawkins, Gerry Kane & William D Cramer. The book is called:

68000 Assembly Language  
Programming Second Edition  
ISBN 0-07-881232-1

This is a pure 680x0 programming book, it has nothing in it at all about Amigas.

I used to program Z80 processors, and I can tell you that the 68000 is much simpler to program, as it only has about 60 instructions and 13 addressing modes, the Z80 had about 450 different instructions to worry about. What you will find hard is the Amiga OS. The only way to sort that out is with practice. There are lots of other books that you can use, but the Amiga bible is the Rom

Kernal Manuals, very expensive, and mainly for C programmers, but they are THE reference guide to the Amiga.

## OTHER

Dear *aii*,  
Being a newcomer to the Amiga (12 months), I have learnt a considerable amount of helpful knowledge thanks to your magazine. Your magazine has helped me in organizing, understanding and using the Amiga.

I have now decided a complete career change and have come up against problems. I want to become a computer graphic Artist but cannot find any information. I live in West Yorkshire and have tried all my local colleges which have only suggested graphic design which doesn't appeal to me. I want to study and learn how to use my computer in art, animation, morphing, 3D, ray tracing etc, and gain any possible qualifications. So I would be grateful if you would give me any advice as to how or where I could find out if there is anything available for me.

Brian Griffiths  
West Yorkshire

Dear Brian,  
I don't think that you will find such a course offered anywhere. Graphic design is a good starting point. The big problem is that whatever system that you learn on is unlikely to be the system that you end up using.

Much of what you want falls into the video/cinematographic areas so perhaps you should have a look for courses in that area. Your computer is only a tool and it is the talent and training of the person using the tool that actually produces the results.

I have used some very expensive graphic workstations, but the end results... well, if you want one oblong box sort of sitting on top of another oblong box, then I'm your man! (I think I'll stick to Amiga Answers, a much easier task for me)

## OTHER

Dear *aii*,  
re: *aii* Superdisk 27  
I am a new reader of your

magazine having recently purchased an Amiga A1200 with hard drive and shall be pleased if you can offer assistance on a problem with the above disk.

If I boot from your disk I can double click on the Transplant game to get it to run. If I boot from hard disk and double click on Transplant I get what I assume to be the title page of the game in a very scrambled format.

I note that your Workbench is version 1, mine is 3 and presume that different preferences are being set. I have tried altering my screenmode prefs but without much success

Also some of the .doc/.txt files when double-clicked report not executable despite the icon stating they are executable. I realise these files can be viewed by invoking 'more'. I just don't understand why some files produce text on the screen and others don't.

Your magazine seems to be the more serious minded of the bewildering array of magazines for the Amiga and I shall continue to take it. Could we possibly have some articles on the A1200 operating system and commands like assign and path etc, which I am attempting to come to terms with as they appear to be at the root of some of my problems with software, when the system can not find libs or data files.

I presume the continual ticking of the Amiga floppy is normal (mine does it all the time) though I find it a bit disconcerting. Is it better to have a disk in the drive even if working from a hard disk? Will this save wear and tear?

T.J. Walsh  
Lancashire

Dear T.J Walsh,  
The ticking of the Amiga drive is quite normal and does not harm the drive at all. I happen to like to hear the drives clicking, as I find it useful as a check that the Amiga has not crashed. (I write some rather naff code at times!) However, you can stop the drives clicking by popping a disk in or running one of the many NoClick utilities that are available.

As you collect more issues of *aii*, you will find that many of the basic commands are explained. Especially in the Mentor sections, I'm sure that you are finding our series 'First Steps on the 1200' right up your street.

The doc files... there are several reasons why this could happen. If you click once on an icon, and select 'information' from the workbench icon menu you will see an entry for default tool. This default tool is the name and location of the program that will be used to display that particular. Unfortunately there is no standard for text readers. I wish people who write such files would realise this and just use the standard ED that everyone has. One of the things I do when I install a new program is a quick check of the icon tooltypes to see if there is anything oddball (such as powerpacked files)

Coverdisk 27 ... Grrr! That one has caused me a few problems. It is NOT your system. I can't get Transplant to work on my A2000 hard drive, so you are not alone. (However, I had it running fine. ED) It also has problems with the A500+, so I'll assume that it expects to have memory in a specific place. This version of Transplant appears to be floppy only I'm afraid. (It's a good blast 'em up I must say).

**When writing to Amiga Answers include as much information as possible about your system and about which software/hardware you are running. This will help to determine what your problem might be and its solution!**

**Send your questions to:**

**Amiga Answers  
Amiga User International  
48 George Street  
London W1H 5RF**



# amiga



## u s e r I N T E R N A T I O N A L

# Next Month

## In The Best Amiga Magazine

Next month we really will have the Picasso and Emplant boards which we said would be in this issue. "Technical difficulties" is our reason why they aren't here this month.

But our apologies anyway.

Plus in the *Monster* February *au*i you'll find reviews of Final Writer, Money Matters, Airlinks, Pegger and lots more.

An exclusive interview with GVP and a major comprehensive guide to the printers of '94.

And there will be a sensational exclusive full commercial program on the cover.

As usual, the magazine will be packed with all the fascinating range of Amiga products and news and happenings brought to you in the unique *au*i style.

In the shops by the second Thursday of January – don't miss it – Amiga User International.

**An Amiga Magazine Like No Other!**



# write to reply

on writing operating systems; nor that they have played any part in the development of the Amiga. Perhaps it would be timely to remember that they did not even write MSDOS, but bought it off-the-shelf from another company!

With Regards  
Andrew Jones  
North Devon

## **This is where you get your chance to speak – or write – your mind about what’s bugging you. Bud Vennos fields the bouquets and the brickbats.**

Dear *aii*,

I reply to your reply in the November issue, to L.J. Brittain on his disappointment over the “Quarterback Tools Deluxe” carry on.

You state that had he looked in the contents pages he would have found no reference to “Quarterback T/ Del”. Does that mean you’ve forgot to put it in the contents pages? Or having put the contents pages together at the last stage forgot to take any reference to “Quarterback t/ Del” off the other pages?

You say, quote “Lesson One - don’t always believe what you read in the papers”, and “Lesson Two - read the contents if you want to know what’s in the magazine”.

If we take your word and adopt Lesson One then we would not believe Lesson TWO!

If we adopt Lesson TWO then we would not take any notice of Lesson One.

In other words YOU can’t have it both ways.

Taking Lesson One, How are we to know which is correct when one page says “Yes it is”, and the other says “No, it isn’t? I suggest that on your contents pages you put IN BIG PRINT “DISREGARD ALL OTHER PAGES THIS IS THE ONLY ONE THAT’S CORRECT” *aii* get your ACT TOGETHER

Yours most disappointedly  
David M Thornton  
Dundee

Dear David M. Thornton,  
There is an old adage which a disrespectful friend of the Editor is fond of quoting:

Rule One : The Editor is always right.

Rule Two: Even if the Editor is wrong Rule One applies.

Now that may be the case and be accurate but accuracy is not your own particular strong point. (I have gone to quite a lot of trouble to correct your spelling!) We didn’t forget to put a reference to QuarterBack Tools in the Contents. It wasn’t in the magazine so no reference was needed.

When I said don’t always believe what you read in the newspapers, the operative word was “always”. That means what it says - not always but not never either.

Our Contents page was correct. And at the top of it it says “Contents”, meaning what’s in the magazine. If something is mentioned on another page, that might be correct but shouldn’t be taken blindly as being so.

Get your own act together and read what is said, not what you think is being said.

And you are quite right in saying that the Contents pages are to be believed before any of the others. But we don’t have to put a statement to the effect on them because intelligent readers - and I hope that means all *aii* readers including you - though you give me cause to wonder - would realise that without having to be told.

Dear Editor,  
I don’t usually resort to writing petty letters to magazines, picking out small errors in the articles, but a news item in the November issue of *aii* has stirred me into putting printhead to paper. The offending piece I refer to is entitled “Deadly Crashes”, and it attributes the writing of the Amiga’s operating system to Microsoft. This is not the case as I will now explain:

During the Amiga’s development in the early 1980s,

the design team in California wrote a central control program known as a “kernel”, and called it Exec, short for executive. It was not a proper operating system in the true sense, since it didn’t have a method for organising files, controlling resources or supporting the multi-tasking that gives the Amiga its unique abilities. Rather than spend valuable time writing an operating system from scratch, the team recruited a British development house called Metacomco to provide the necessary expertise.

AmigaDOS, (as the software was soon to be called), was based on an existing operating system called Triplos, which was written at Cambridge University with the ideal of being a highly-portable, multi-tasking minicomputer O.S. that was both smaller and faster than UNIX, which appears to be taking over the world of “serious” (i.e. expensive) computers.

While Intuition, the Amiga’s WIMP system, is very closely tied to the Computer’s operation, it is entirely separate from both AmigaDOS and Exec. It too was not written by Microsoft, but by an ex-videogame programmer and principal development team member called R.J. Mical, which probably suggests why the Amiga’s icon design is much more appealing in graphic terms than the P.C.’s Windows or Atari ST’s G.E.M.

I hope that my letter is not regarded as a major criticism of *aii*, since the degree of technical accuracy in the magazine is usually of a very high standard; I just hope that readers are not left thinking that Microsoft have a monopoly

Dear Andrew,  
Thank you for the correction. You are, of course, quite right in attributing the operating system to R.J. Mical et al. (The ebullient R.J. is now unfortunately involved with Trip Hawkins on the 3D0 and no longer with the Amiga).

And the name Metacomco is one to conjure with for old Amiga hands as it used to be with some pride that we could inform the Americans we met that the Amiga had benefited from the expertise on this side of the Atlantic too.

The confusion came because the Microsoft did frequently appear at the top of screens of Amiga programs. They had been involved in developing the disc operating system which is now the basis for virtually all modern computers. So it would not have been surprising to have found their name trade marked in this way. You are quite right in saying this is now rarely the case. However with the way that Windows is taking over the desktop computing world, we might well be finding Bill Gates’ picture popping up whenever we turn on a computer in future. Or if not on our screens at least on a USA hundred dollar bill - named after him, of course.

Dear Mr. Mael,  
Re: your news article in *aii* Nov 93 featuring the Seikosha Smart Label Printer:

For your information there is no Amiga driver available for the SLP and the only way to use it on an Amiga would be via a bridgeboard. Hardly convenient. I noticed that Amiga Format printed the same photo of the SLP in their news section. It’s a shame that you guys print press releases from producers that offer no support to the Amiga. A bit misleading to the readers?

Regards,  
Andrew Brown

Dear Andrew Brown,  
Bud Vennos threw your letter at me and said I should answer it. I could say it was all Martin Witton’s fault - though I won’t



though it was. The said M. Witton insisted we include the item because labels are a particular turn on in the Witton household. Everything has to be labelled, put in its place and generally not allowed to be moved under pain of worse than death. Once when I there was there I got classified, tidied up, labelled and stuck in a black plastic binliner with the winter woolies, before I could protest. Labels are adored.

It reminds me of girl I once knew who kept writing her name on my LPs and books and when she moved out took everything with her name on with her. The Witton household is like that, give them a label on something and it's theirs for life.

But to your problem of the Amiga driver for the Seikosha label maker. No, as yet there isn't one. But to give M. Witton proper due, it didn't say in the news item that there was. In fact, it implied there wasn't by pointing that you could print labels with the Amiga but they didn't look so pretty.

As for the photograph, you are quite right it was supplied to us - and to other magazines. But Seikosha do support the Amiga, we have a review of one of their printers in this issue of **aii**.

However, we didn't intend to be misleading so as some recompense if you were misled, if you wish you can visit the Witton Castle and help sort the labels that they are preparing for the year ahead. (7643 of them. Won't that be fun?!).

As Wittongenstein the famous North London philosopher used to say "Gif me a child up to the aitch of seven and I will label 'im for life."

**AM**

Dear **aii**,  
Please find enclosed, letters pages from **aii** - November 93 & AF - December 93. Are the G.D. King's related perchance? I plan to spend # #er the next few weeks on food. Without Coverdisks, commercial software just doesn't come into it. Jealous, moi? You bet.

Yours unemployed,  
Sean O'Farrell  
Archway  
London

Dear Sean,  
Thanks for drawing our attention to the strange epidemic of G.D. King's about. It must, of course, be a simply amazing coincidence that more than one G.D. King has an Amiga and takes the trouble to write to magazines commenting on cover disks. What

are the probabilities of that do you think?

An old friend of mine who had a degree in mathematics once told me that tossing a coin or, in his case, as his hobby was going to greyhound races and betting sums of money he only later in his career as an actuary would be able to afford, that betting on successive choices (e.g. black in roulette) was a mug's game. The reason? Because there was no way that even if heads came up fifty times in a row - or the favourite lost every race for a month - or the ball stopped on red all night long - that there was any mathematical probability that the next toss or race or spin of the wheel would be any different - or the same. Each event was entirely separate.

Yet here we have two G.D. Kings writing about the same subject to two different Amiga magazines. Astounding! Do you think that there could be an even more astonishing coincidence that two SEAN O'FARRELLS, (possibly even more mind-bogglingly both from Archway!) will also be appearing in the two magazines also writing about THE TWO G.D. KINGS?! No, I just can't believe it.. But you never know, do you? It could, as the Editor would say, be something to do with time not being lineal (or is it circular?)

Anyway write to me again and I'll send you a free piece of commercial software so you won't have to go hungry!

Dear **aii**,  
I bought your November issue for the sole reason of assisting me in the choice of a new monitor. Your article on such promised many things, Viz "Every specification You (That means me right?) could want ..... all laid out in an easy to compare table". Your article begins with great promise, a whole page to describe the depth and involvement of the tests, the accuracy you hope to achieve, the marking system to be employed.

What happened next? Did someone else not party to all these great tests finish the article or what? Your article left me with virtually no useful information on the monitors whatsoever, in fact a short summary by an advertiser in the same issue gave far more information. Where were these results, calculated from many hours of careful marking, to aid me in my future choice?

Please print a clear and concise summary of these results, to include types of input available (I may want to connect my CD32 to it, I may want to connect a VCR to it), tabulated results for convergence, grey scale tracking, linearity, dot pitch, bandwidth, scan rates, audio o/p, controls available, etc, etc, instead of the hotch potch of vague recommendations.

Armed with such information I truly could feel informed enough to make the correct choice.

Finally, I hope your "friendly monitor engineer" has a few words with the writer of "What makes your monitor tick". I don't think an inaccurate description of what occurs in the CRT to warrant such a headline.

I generally find your articles of value, but in this case I expect far, far better from (quote) "The best Amiga magazine".

Yours Faithfully  
Dave Walker  
East Grinstead  
West Sussex

Dear Dave

Wow! Six pages and it's not still enough! Who says size isn't important? Okay, okay! I'm told that your wishes shall be granted. Your desires are our command. Perhaps we shall even shortly have An Amiga User's Charter signed personally by the Editor and the Prime Minister in their very own personal secretary's blood. It will

no doubt make certain guarantees that like the other Charters of recent creation - I don't count the Magna Carta - are unlikely to be fulfilled.

You shall have the info you request. Not this issue but we'll try to get it for you in the future and if we can't find room we'll send it to you. What about that for service?

But what's this about our recommendations? Hotchpotch? I thought that was a game played on the pavement by the delinquent and ragged children of single parent families before they were old enough to take up a life of crime on the dole in council houses. (They are generally called working class names like Nicholas, Victoria, Katie, Annabelle or even Maximillian!)

But surely what most people do want is to be told which are the best buys for them. They don't, like you, request multiple chapter and verse on a subject like monitors. (Just a sec, is that another dot there? Add that to the list, Martina!)

They want to know what's good, what's better and what isn't. It saves them time and money. Yes, they want to be told the general idea but not every single tiny weeny dot pitching dot detail. (Another dot, Martina? Impossible I counted them, every single one I'm certain.) Oh well, you can't please everyone though we try - particularly au pairs from Finland and France. But as the old wives (not mine) used to say "One man's advice is another man's hotchpotch."

Send your letters to:  
Write to Reply

**aii**

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London W1H 5RT

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If you want to find out what will be in store for you when you buy Super Sound then read on.

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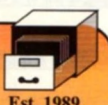
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**L**ong, long ago, before I had to go to shows to earn a living, I went because I WANTED to! In fact, if you can find any old magazines from around 1984, you'll probably be able to see pictures of me, ripping posters from the stands of software companies like Bug-Byte, Imagine, Activision and even Ocean.

Most of them have disappeared now, either swallowed up by bigger companies or just plain gone bust. Some have even become bigger companies themselves. Of the above Golden Age household names, only Ocean was in evidence at this Future Entertainment Show (FES), with a stand made into a burger bar.

The FES disappointed me, I'm sorry to say. Whether this is because I can no longer mix elbows with the best of the goodie-grabbers, whether it's because I've grown up (at last), or because the industry has grown up, I wouldn't like to speculate.

Goodies were strangely rare, even if I had been on the lookout.

But there were a number of sights to see which made me glad I had made the journey (to Olympia, the show Hell-hole of the galaxy).

Commodore took its "not just any old android" stand along to the event, complete with the standard equipment metallic-suited alien female types, reciting their strangely soothing list of the CD32's many strong points. Why soothing, I wonder? Could it be that, reflected in their shades I could see the Ashley Cotter-Cairns of ten years ago, wide-eyed and ready to be impressed?

The android's sting may have been dulled by seeing it on TV (once at least, maybe even twice!). And the games running on it appeared remarkably similar to those displayed at Live '93! It was nice to hear live music, thanks to Andy Bishop and Bars and Pipes Professional.

I was stunned by 7th Guest, the wonderful 3D murder mystery adventure, which has now apparently been delayed until early 1994. But it did feel just like being part of a movie, which is what Philips has been claiming about its CD machine ever since it was launched.

Not far away, a stand provided by the organisers contained a 3DO machine, doing impressive 3DO-type things, while Sega and Radio One FM competed for the coveted "Let's make the most noise while giving goodies away" trophy.

It was all too much for me. With a fully-fledged funfair with genuine tacky carousels at one end of the hall (complete with arcades - who

would pay for games when the show was full of free ones is a mystery to me) and a huge, inflatable Sonic the Hedgehog grinning at me from the other, I decided to rush around collecting information on new products.

Except I couldn't find any. It seems that the spirit of the PCW show has been taken to an even greater extreme - now the FES has gone from the one extreme (a media showcase with nothing for people to buy) to the other (a glorified market). Will someone please put together a compromise?

ACC

**W**ell, I can't agree with Ashley. He hasn't grown up. Ha-ha! Mind you, neither have I, as a certain

# The Last Page

## THE FUTURE OF ENTERTAINMENT?

**Ashley Cotter-Cairns, David Taylor and**

**Anthony Mael check out the latest attempt at**

**a consumer gamesfest: "The Future**

**Entertainment Show."**

girl of my acquaintance keeps reminding me. (Please don't hit me any more, Mairi!)

Enough of pleasure, down to work. That was the problem with the show, though. It was supposed to be a mixture of the two, but it seemed more like an excuse for shops to act like market traders and software companies to turn out once more. No one there was ecstatic and it was merely a case of whipping up flagging enthusiasm for a few tired games.

I couldn't be bothered with the funfair and spent my time revisiting the PR people I know and stealing their T-shirts (well, their spare T-shirts if you see what I mean).

The whole show was loud and brash and everyone vied for attention by huge screens and screaming idiots. The Zool character was wandering around again, am I getting blasé about meeting him?

There were some good stands there, but strangely they were the more serious ones. Fargo were

showing their Primera colour printer which looks like a bargain - await a review in **AUI**. Digita had a few new programs, including a sneak preview at Wordworth 3 which I saw.

Bargains galore were to be had on the software front and it was these shop stands that merited visiting. All in all, it was a waste of time for seeing "future entertainment", but OK for a wander around the other stands. Still, £7 entrance fee soon eats into any discount.

DT

**W**ow! Two games addicts don't like a games show! And who am I to disagree? Games are for playing - or selling. They are not for showing. Free goes on a Nintendo isn't my bag but have the guys who love that stuff gone over the hill?

While I was there the biggest crowd - practically every loose body not firmly attached to a stand was drawn irresistibly toward a large stage on which some crass TV pseudo celeb was baiting the gathered populace.

"What's the greatest show on TV

in the universe? Yes!!!

GAMESMASTER!!! We're going out live and there's a camera up there and another up there and another up there. So I want to you to go absolutely MENTAL!! Don't want anyone BORING! All of youse go completely MENTAL, d'yer hear me? And who wants a Nintendo game?"

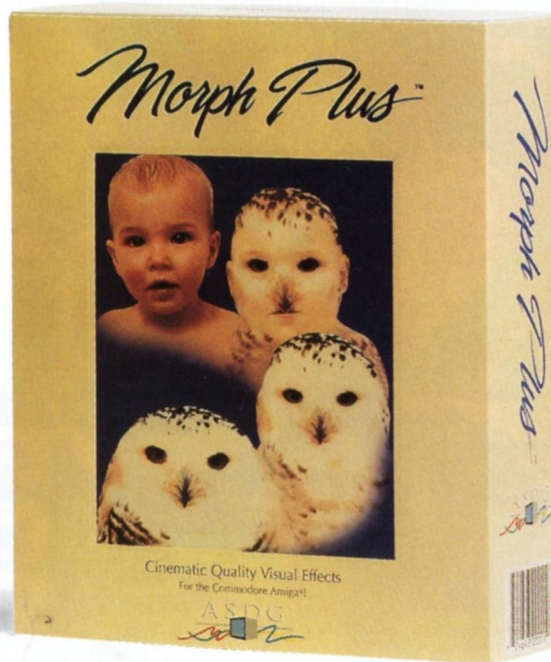
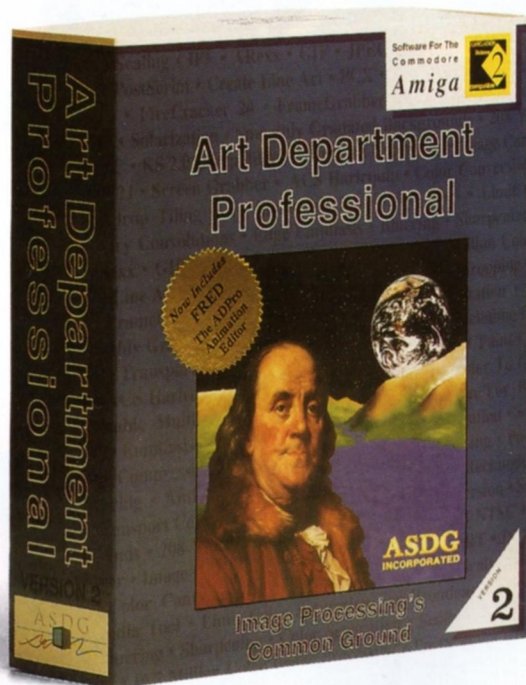
And they went MENTAL.

There was a bit of sanity at the Show called The World of the Amiga - that was once a Show of its own. Remember? But it was so noisy all round that I couldn't hear myself use a monitor.

Maybe it's because I don't care much for toyshops these days or for people who find computing BORING...even boneheads who scream and shout and go MENTAL - I'm talking about the ones ON the stage not watching - don't thrill me so much anymore... Yes, I know Commodore has to sell the Amiga CD 32 to kids but agonising as it seems, all of us, even poor Ashley and Dave and me and you, have to grow up, don't we? Don't we? **AM**



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show Quantum Leap and for major motion pictures.

- Mark Swain, an AmigaWorld reviewer (and animator for Foundation Imaging, the creators of the special effects for Babylon 5), said, "MorphPlus produces the most realistic shape shifting special effects I have ever seen on a desktop."
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